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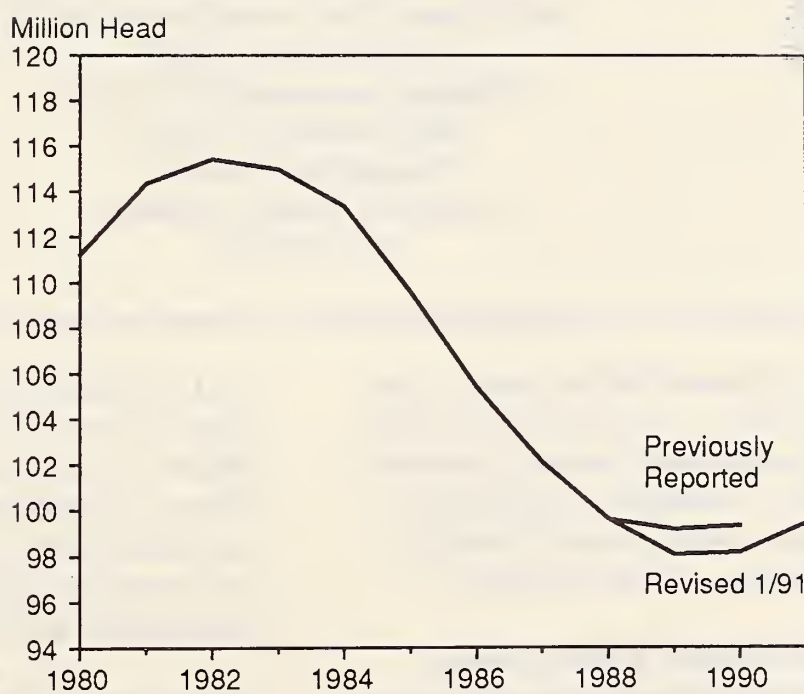
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Livestock and Poultry

Situation and Outlook Report

U.S. January 1 Cattle Inventory



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The present forecasts will be updated, if needed, in the World Agricultural Supply and Demand Estimates scheduled for release on March 11, April 10, and May 9, 1991.

The **Livestock and Poultry Situation and Outlook** is published six times a year. Subscriptions are available from ERS/NASS, Box 1608, Rockville, MD 20849-1608, or call, toll free, 1-800-999-6779 (8:30-5:00 ET). Rates: 1 year \$17, 2 years \$33, 3 years \$48. Foreign customers add 25 percent for subscriptions mailed outside the United States. Make check payable to ERS/NASS.

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Summary

Moderate Cattle Expansion Continues.

The January 1, 1991, cattle inventory was reported at 99.4 million head, 1 percent above the 1990 downward revision. The 1990 calf crop was off 1 percent. The expansion phase of the cattle cycle continued as the smaller calf crop was offset by reduced cattle and calf slaughter. This year, the inventory growth is expected to accelerate due to an expanding calf crop and continuing high cattle imports with only modest increases in cattle slaughter. Positive returns since 1986 have led to 3 percent more replacement beef heifers. Over the next several years, expectations are for slower herd rebuilding that peaks at lower levels than in recent cycles.

Beef production in 1991 is forecast to rise 1 to 2 percent, due almost entirely to increased fed cattle marketings. Throughout all of 1990, cattle on feed were above a year earlier, yet marketings remained below. Second-half 1990 net feedlot placements, due largely to record feeder cattle imports, were the highest for this period since 1978. As a result, the sharp increase in cattle on feed for January 1 has led to increased uncertainty over fed cattle marketing patterns in 1991. Cow slaughter is expected to remain near the cyclical low. Calf slaughter is likely to continue decreasing.

The sheep and lamb inventory as of January 1, 1991, declined 1 percent; the first decline since 1986. This decline is a reaction to continued low lamb prices, which averaged

\$55.54 during 1990. Production for 1991 is expected to be up less than one percent, to 360 million pounds. Lamb prices for 1991 are expected remain around 1990 levels.

Broiler production is expected to increase 5 percent in 1991, compared with 7 percent in 1990. Expansion, encouraged by good returns last year, is tempered by economic and export uncertainties. The export outlook has become tempered by economic and export uncertainties. The export outlook has become clouded due to uncertainties regarding availability of additional credit to finance broiler sales to the USSR. However, total 1991 broiler exports are still expected to be about 1 billion pounds, down from the 1990 record of 1.14 billion pounds. In 1990, 27 percent of U.S. broiler exports went to the USSR.

Turkey production will likely increase 5 percent, compared with 9 percent last year. Turkey growers in 20 major producing States indicated intentions, as of December 1, 1990, to increase 1991 production by 5 percent. Sharp price declines at the end of 1990 and producer returns only marginally above breakeven contributed to the decline in the production growth rate.

Total egg production will likely increase about 1 percent in 1991, with table eggs expanding more slowly. Both wholesale and retail prices are expected to continue relatively high, but below levels of last year.

Table 1--Livestock, poultry, and egg production and prices (All percent changes shown are from a year earlier.)

Item	1988	1989	1990			1991 1/				
	Annual	Annual	III	IV 1/	Annual 1/	I	II	III	IV	Annual
Million pounds										
Production:										
Beef	23,424 ₀	22,974 ₋₂	5,814 ₋₁	5,564 ₋₄	22,618 ₋₂	5,525 ₀	5,725 ₀	6,000 ₃	5,750 ₃	23,000 ₂
% change										
Pork	15,623 ₉	15,759 ₁	3,639 ₋₄	4,105 ₋₁	15,291 ₋₃	3,875 ₋₁	3,775 ₄	3,775 ₄	4,175 ₂	15,600 ₂
% change										
Lamb & mutton	329 ₆	341 ₄	85 ₅	90 ₋₁	358 ₅	95 ₂	87 ₋₃	87 ₂	91 ₁	360 ₁
% change										
Veal	387 ₋₇	344 ₋₁₁	80 ₋₅	88 ₅	321 ₋₇	74 ₋₆	72 ₋₃	73 ₋₉	73 ₋₁₇	292 ₋₉
% change										
Total red meat	39,763 ₃	39,418 ₋₁	9,618 ₋₂	9,847 ₋₃	38,588 ₋₂	9,569 ₀	9,659 ₁	9,935 ₃	10,089 ₂	39,252 ₂
% change										
Broilers 2/	16,124 ₄	17,334 ₈	4,630 ₅	4,790 ₈	18,572 ₇	4,750 ₆	4,975 ₇	4,900 ₆	4,900 ₂	19,525 ₅
% change										
Turkeys 2/	3,923 ₆	4,175 ₆	1,223 ₄	1,252 ₆	4,560 ₉	1,030 ₅	1,150 ₄	1,290 ₅	1,300 ₄	4,770 ₅
% change										
Total poultry 3/	20,588 ₄	22,039 ₇	5,982 ₅	6,157 ₈	23,655 ₇	5,915 ₅	6,265 ₆	6,315 ₆	6,325 ₃	24,820 ₅
% change										
Total red meat and poultry	60,351 ₄	61,457 ₂	15,600 ₀	16,004 ₁	62,243 ₁	15,484 ₂	15,924 ₃	16,250 ₄	16,414 ₃	64,072 ₃
% change										
Million dozen										
Eggs	5,784 ₋₁	5,587 ₋₃	1,413 ₂	1,444 ₂	5,659 ₁	1,415 ₂	1,430 ₁	1,425 ₁	1,445 ₀	5,715 ₁
% change										
Dollars per cwt										
Prices										
Choice steers, Omaha 1000-1100 lb.	69.54	72.52	75.48	79.44	77.40	76-80	76-82	74-80	76-82	75-81
Barrows and gilts, 7-markets	43.39	44.03	57.67	51.67	54.45	50-54	52-58	53-59	48-54	50-56
Slaughter lambs, Ch., San Angelo	68.26	67.32	52.07	50.33	55.54	53-57	57-63	50-56	50-56	52-58
Cents per pound										
Broilers, 12-city avg. 4/	56.3	59.0	57.2	48.8	54.8	50-54	52-58	53-59	50-56	51-57
Turkeys, Eastern region 5/	61.2	66.7	66.3	68.6	63.2	52-56	55-61	64-70	67-73	59-65
Cents per dozen										
Eggs New York 6/	62.1	81.9	77.8	88.5	82.2	82-86	69-75	71-77	73-79	73-79

1/ Projected. 2/ Federally inspected. 3/ Includes broilers, turkeys, and mature chickens. 4/ Wholesale weighted average. 5/ Wholesale, 8- to 16-pound young hens. 6/ Cartoned, consumer Grade A large, sales to volume buyers.

Factors Affecting Livestock and Poultry

The outlook for the general economy is dominated by uncertainty, in part as a result of the Persian Gulf conflict and the length and depth of the recession. Future economic activity appears to hinge on the effects of lower interest rates and credit sensitive spending. Currently, consumer purchases are lackluster, new residential investment is in the doldrums, and business activity is slowing resulting in increasing unemployment.

The Federal Reserve has made a concentrated effort to ease monetary policy. As a result, the Federal funds rate dropped over a 100 basis points between November 1990 and mid-January 1991. Abating inflationary pressures allowed the Federal Reserve to lower Federal funds rate targets, apparently to counteract a weak money supply growth in December. In the face of slow money growth and moderate inflation, the Federal Reserve will likely allow interest rates to decline further.

Quick resolution of the Persian Gulf conflict also would stimulate the economy. Continued lower oil prices and a resurgence of consumer confidence would keep the recession mild.

Cattle marketing changes and reduced market data availability necessitate a shift in the base cattle price series used in the **Livestock and Poultry Situation and Outlook** as well as the monthly **Livestock and Poultry Update**. Beginning with the May 1991 Situation and Outlook report, the price series will shift to:

Nebraska direct, Choice, 1,100-1,300 pound steers from Omaha, Nebraska, Choice, 1,000-1,100 pound steers;

Oklahoma City, Medium No. 1, 600-700 pound feeder steers from Kansas City, Medium No. 1, 600-700 pound feeder steers which will only be available seasonally; and

Sioux Falls, South Dakota, Boning Utility cows, from Omaha Breaking Utility cows which has been discontinued.

The old price series will be continued in the Selected Price Statistics table as available from the Agricultural Marketing Service's **Livestock, Meat, and Wool Market News**. Historical data for the new series and comparisons with the old series are presented in the Selected Price Statistics table in the back of this issue.

Feed costs in 1991 are expected to decline, reflecting lower protein feedstuffs prices. Soybean meal prices in the 1990/91 marketing year are projected to average \$150-\$170 per ton, compared with the estimated \$174 in 1989/90. Farm corn prices are expected to average \$2.20-\$2.40 per bushel in 1990/91, compared with an estimated \$2.36 in 1989/90.

Livestock and Red Meats

Cattle

Feed-Forage Supplies Improved

Hay stocks on December 1, 1990, were 4 percent above a year earlier and 16 percent above the 1988 stocks. These larger stocks supply a good buffer to supplement livestock until spring grazing begins, particularly given the mild weather since mid-January. The change in weather pattern, particularly in winter grazing areas, should result in much improved pasture and small grain grazing conditions in many areas. The exception is the continued drought in California and dry conditions in much of the far west. Cattle inventories are relatively low throughout the country, reducing the pressure on available grazing supplies. However, 1991 will be the fifth consecutive year of drought in California. Native pastures and ranges, as well as stock water resources will likely be slow to recover when normal moisture levels return.

Additional wheat grazing will probably be available this spring in winter wheat areas of Kansas, Oklahoma, and Texas. Although the total winter wheat area seeded last fall declined 10 percent from a year earlier, the change from a year earlier in these areas was down 5 percent, up 1 percent, and down 10 percent, in Kansas, Oklahoma, and Texas, respectively. Harvested wheat acreage must be reduced to meet the announced 15 percent acreage reduction program (ARP) requirements to qualify for program participation. The ARP acreage requirement in 1989/90 was 5 percent. Improved growing conditions and favorable wheat grazeout prospects will carry the current stocker- cattle inventory on

Table 2--Hay acreage, production, and stocks

Item	1988	1989	1990	1990
				---- 1989
		1,000 acres		Percent
Acreage harvested	65,055	63,300	61,557	-3
Yield/acre	1.94	2.30	2.39	4
		1,000 tons		
Production	126,010	145,512	146,985	1
Stocks on farms				
May 1	27,074	17,507	27,089	55
December 1	90,312	101,194	104,993	4
Production + May 1 stocks	153,084	163,019	174,074	7

The National Agricultural Statistical Service (NASS) semiannually reports the U.S. cattle herd based upon a probability sample. This sample survey procedure for the January 1, 1991, report includes observations drawn from two sources—a list of cattle producers and area tracts of land. The sample drawn from the list of cattle producers consists of about 57,300 agricultural producers. Additional information was collected from operators within about 7,500 small land-area tracts.

All probability sampling procedures are subject to sampling variability. NASS procedures place the sampling variability, as measured by the relative standard error, at 1.1 percent of the national cattle and calf inventory and major classes such as all cows and the calf crop. This means that by random chance alone, approximately 95 out of a 100 times, two standard errors, the survey estimate of the cattle inventory would be within 2.2 percent of total cattle population at the national level. The relative standard error for the other individual classes within the cattle herd is greater and ranges from 1.3 to 3.4 percent according to NASS. Survey estimates are also subject to non-sampling errors but procedures followed by NASS minimize them. Balance sheets are used as an additional check on survey estimates.

cattle, including cows, to utilize excess wheat pastures, if increased acreage is grazed out. In a special **Planting Intentions** survey conducted in late January, farmers indicated they intend to plant 19 percent more sorghum in 1991. State data were not released, but the primary sorghum and winter wheat areas are in the High Plains. This might suggest increased wheat grazing available at least until the sorghum is planted.

Cattle Inventory Up, Previous Inventories Revised Downward

The January 1, 1991, cattle inventory was reported at 99.4 million head, 1 percent above the year-earlier revised level. This indicates that the expansion phase of this cattle cycle continues. Revised 1989 and 1990 inventory data show that the past cattle cycle liquidation phase was deeper than previously reported. January 1989 continued to mark the switch from herd liquidation to expansion. Downward revisions started with the July 1988 inventory, with greater revisions occurring for the beef sector than dairy.

The January 1989 herd was revised downward by 1,115,000 head, 1.1 percent below the previously reported inventory. The January 1990 inventory was revised 1,175,000 head lower, a 1.2-percent reduction. Smaller percentage revisions were made to the annual calf crop than the total herd. The calf crop for 1988 was reduced by 295,000 head, off .7 percent, and lowered by 40,000 head for 1989, a minor reduction.

The 1990 calf crop was reported at 39,879,000 head, off 1 percent from the July 1990 estimate. The trend toward an increasing proportion of calves born during the first half of the year continues. Last year 73.2 percent of the calf crop

wheat pasture through late spring. Continued favorable conditions are likely to result in strong demand for thin stocker

Table 3--Commercial cattle slaughter 1/ and production

Year	Steers and heifers			Total Cows	Bulls and stags	Total	Dressed weight	Commercial production
	Fed	Nonfed	Total					
-----1,000 head-----							Pounds	Million pounds
1987								
I	6,507	443	6,950	1,651	163	8,764	657	5,754
II	6,510	585	7,095	1,604	179	8,878	646	5,737
III	7,011	394	7,405	1,636	182	9,223	657	6,064
IV	6,401	495	6,896	1,719	166	8,781	666	5,850
Year	26,429	1,917	28,346	6,610	690	35,646	657	23,405
1988								
I	6,621	281	6,902	1,528	151	8,581	664	5,700
II	6,777	314	7,091	1,505	164	8,760	660	5,784
III	7,209	248	7,457	1,576	167	9,200	672	6,185
IV	6,192	457	6,649	1,729	162	8,540	674	5,755
Year	26,799	1,300	28,099	6,338	644	35,081	668	23,424
1989								
I	6,390	97	6,487	1,550	144	8,181	676	5,530
II	6,959	27	6,986	1,541	166	8,693	665	5,777
III	6,785	195	6,980	1,460	175	8,615	684	5,893
IV	6,055	437	6,492	1,765	172	8,429	685	5,774
Year	26,189	756	26,945	6,316	657	33,918	677	22,974
1990								
I	6,302	130	6,432	1,533	152	8,117	678	5,507
II	6,873	120	6,993	1,385	163	8,541	671	5,733
III	6,611	300	6,911	1,369	170	8,450	688	5,814
IV	5,944	386	6,330	1,623	159	8,112	686	5,564
Year	25,730	936	26,666	5,910	644	33,220	681	22,618

1/ Classes estimated.

Table 4--Cattle balance sheet

Year	On farms Jan. 1	Im- ports	Calf crop	Total supply	Slaughter Cattle	Calves	Death loss	Ex- ports	Disap- pearance	To balance	On farms Dec. 31
1,000 head											
1950	77,963	461	34,899	113,323	18,614	10,501	3,742	8	32,865	1,625	82,083
1951	82,083	239	35,825	118,147	17,084	8,902	3,863	8	29,857	(218)	88,072
1952	88,072	140	38,273	126,485	18,625	9,388	4,034	11	32,058	(186)	94,241
1953	94,241	198	41,261	135,700	24,465	12,200	4,060	15	40,740	719	95,679
1954	95,679	86	42,601	138,366	25,889	13,270	4,063	21	43,243	1,469	96,592
1955	96,592	314	42,112	139,018	26,587	12,864	4,052	35	43,538	420	95,900
1956	95,900	159	41,376	137,435	27,755	12,999	3,912	37	44,703	128	92,860
1957	92,860	728	39,905	133,493	27,068	12,353	3,801	44	43,266	949	91,176
1958	91,176	1,152	38,860	131,188	24,368	9,738	3,810	26	37,942	76	93,322
1959	93,322	709	38,938	132,969	23,722	8,072	3,876	51	35,721	(1,012)	96,236
1960	96,236	663	39,416	136,315	26,029	8,615	4,100	32	38,776	161	97,700
1961	97,700	1,043	40,180	138,923	26,471	8,080	4,018	24	38,593	39	100,369
1962	100,369	1,250	41,441	143,060	26,911	7,857	4,125	19	38,912	340	104,488
1963	104,488	852	42,268	147,608	28,070	7,204	4,040	23	39,337	(368)	107,903
1964	107,903	547	43,809	152,259	31,678	7,632	4,232	62	43,604	345	109,000
1965	109,000	1,128	43,922	154,050	33,171	7,788	4,248	54	45,261	73	108,862
1966	108,862	1,100	43,537	153,499	34,173	6,863	4,049	35	45,120	404	108,783
1967	108,783	752	43,803	153,338	34,297	6,110	4,045	55	44,507	540	109,371
1968	109,371	1,039	44,315	154,725	35,418	5,616	4,012	36	45,082	372	110,015
1969	110,015	1,042	45,177	156,234	35,573	5,011	4,123	39	44,746	881	112,369
1970	112,369	1,168	45,871	159,408	35,356	4,203	4,297	88	43,944	(886)	114,578
1971	114,578	991	46,738	162,307	35,905	3,825	4,442	93	44,265	(180)	117,862
1972	117,862	1,186	47,682	166,730	36,134	3,201	5,126	104	44,565	(626)	121,539
1973	121,539	1,039	49,194	171,772	34,102	2,404	6,487	273	43,266	(718)	127,788
1974	127,788	568	50,873	179,229	37,353	3,175	6,110	204	46,842	(359)	132,028
1975	132,028	389	50,183	182,600	41,464	5,406	6,992	196	54,058	(562)	127,980
1976	127,980	984	47,384	176,348	43,199	5,527	5,190	205	54,121	583	122,810
1977	122,810	1,133	45,931	169,874	42,381	5,692	6,000	107	54,180	681	116,375
1978	116,375	1,253	43,818	161,446	39,970	4,302	5,800	122	50,194	(388)	110,864
1979	110,864	732	42,596	154,192	34,005	2,927	5,600	66	42,598	(352)	111,242
1980	111,242	681	44,938	156,861	34,116	2,679	5,413	66	42,274	(236)	114,351
1981	114,351	680	44,666	159,697	35,265	2,886	5,059	88	43,298	(955)	115,444
1982	115,444	1,005	44,200	160,649	36,158	3,106	5,429	58	44,751	(897)	115,001
1983	115,001	921	43,885	159,807	36,974	3,162	5,494	56	45,686	(761)	113,360
1984	113,360	753	42,470	156,583	37,892	3,367	5,464	71	46,794	(207)	109,582
1985	109,582	836	41,050	151,468	36,593	3,455	5,046	125	45,219	(871)	105,378
1986	105,378	1,407	41,182	147,967	37,568	3,478	4,992	108	46,146	297	102,118
1987	102,118	1,200	40,152	143,470	35,890	2,902	4,800	131	43,723	(125)	99,622
1988	99,622	1,332	40,293	141,247	35,324	2,565	4,650	321	42,860	(322)	98,065
1989	98,065	1,459	40,102	139,626	34,106	2,223	4,471	169	40,969	(495)	98,162
1990	98,162	2,135	39,879	140,176	33,405	1,840	4,400	120	39,765	(975)	99,436
1991	99,436										

*Preliminary.

was born during the first half of the year, compared with 72.8 percent in 1989 and 71.5 percent in 1988. The number of operations with beef cows continue to decline while average herd size continues to increase. In 1990, operations with beef cows were reported at 932,020, a decline of about 2 percent below the previous year.

Annual Cattle Balance Sheet Shows Modest Herd Expansion with Record Imports

The annual cattle balance sheet shows that the cattle herd is expanding, despite a smaller calf crop in 1990. This crop was offset by a sharp increase in cattle imports and reduced calf and cattle slaughter. The 1990 cattle imports expanded to a record of over 2.1 million head compared with around 1.45 million in 1989 and about 1.33 million in 1988. Due to reductions in Mexican export taxes for feeder steers shipped and the more open border with Canada, cattle shipped into the U.S. are expected to continue at high levels in 1991.

This year, continued reduced cow slaughter and increased numbers of beef replacement heifers are expected to produce a larger calf crop. Returns to cow-calf operators, receipts less cash expenses, have been positive since 1986 and are expected to remain positive for the next several years. How-

ever, cow-calf operators' returns per cow have been below the late 1970's and early 1980's returns, both in nominal and especially in real dollar terms. These lower returns are expected to result in slower herd rebuilding over the next several years than in previous cyclic expansions.

The cattle inventory expansion is likely to accelerate next year, due to an expanding cow herd and increased numbers of replacement heifers, both leading to an expanding calf crop. Cattle slaughter levels are expected to increase slightly but calf slaughter is expected to continue to decline.

The cow herd on January 1, 1991, was reported at 43.8 million head, about 1 percent above the revised herd of a year ago. Most of the cow herd expansion is from beef cows. Replacement heifer inventory is at the highest level since 1986, 9.8 million head, up more than 1 percent. Replacement beef heifers increased by 3 percent, but replacement dairy heifers declined 1 percent. The semiannual balance sheet for heifers entering the cow herd indicated that nearly 4 million entered during the first half of 1990, compared with nearly 4.1 million the year earlier. For 1990, this represented 41.5 percent of the beginning-of-year heifer replace-

Table 5--Heifers entering cow herd January-June and July-December

Year	Jan. 1 cow in- ventory	Intended herd re- place- ments Jan. 1	Total 1/ disap- pearance Jan.-June	July 1 cow in- ventory	Heifers		Intended herd re- place- ments July 1	Total 2/ disap- pearance July-Dec.	Jan. 1 cow in- ventory following year	Heifers	
					Entering the herd Jan.-June	Percent enter- ing				Entering ing herd July- Dec.	Percent entering
					1,000 head	Percent				1,000 head	Percent
1973	52,553	11,306	3,550	54,037	5,034	44.5	11,144	3,487	54,478	3,928	35.2
1974	54,478	12,134	3,627	56,960	6,109	50.3	11,780	4,706	56,931	4,677	39.7
1975	56,931	12,971	5,214	58,053	6,336	48.8	11,306	7,191	54,971	4,109	36.3
1976	54,971	11,148	5,631	53,938	4,598	41.2	10,475	5,815	52,441	4,318	41.2
1977	52,441	10,414	5,224	52,190	4,973	47.8	9,846	5,434	49,635	2,879	29.2
1978	49,635	9,744	4,963	48,413	3,741	38.4	9,340	4,253	47,852	3,692	39.5
1979	47,852	9,459	3,414	47,815	3,377	35.7	9,885	3,235	47,866	3,286	33.2
1980	47,866	10,101	3,303	49,941	5,378	53.2	10,214	3,748	49,622	3,429	33.6
1981	49,622	10,479	3,599	51,004	4,981	47.5	10,856	3,788	50,216	3,000	27.6
1982	50,216	11,154	3,925	49,990	3,699	33.2	10,900	4,183	48,986	3,179	29.2
1983	48,986	10,881	3,885	49,600	4,499	41.3	10,680	4,446	48,543	3,389	31.7
1984	48,543	10,714	4,563	48,500	4,520	42.2	10,450	4,785	46,182	2,467	23.6
1985	46,182	10,318	3,971	46,300	4,089	39.6	9,900	4,114	44,869	2,683	27.1
1986	44,869	9,874	4,340	45,000	4,471	45.3	9,500	4,294	44,412	3,706	39.0
1987	44,412	9,519	3,699	44,400	3,687	38.7	9,400	3,577	43,494	2,671	28.4
1988	43,494	9,371	3,468	43,900	3,874	41.3	9,200	3,522	43,337	2,959	32.2
1989	43,337	9,547	3,524	43,900	4,087	42.8	9,400	3,442	43,353	2,895	30.8
1990	43,353	9,645	3,352	44,000	3,999	41.5	9,300	3,209	43,779	2,988	32.1
1991	43,779	9,779									

1/ Death loss calculated as 1 percent of January 1 cow inventory plus estimated commercial cow slaughter. 2/ Death loss calculated as 1/2 percent of January 1 cow inventory plus estimated commercial cow slaughter.

ment inventory, which was at about the same percentage as the preceding 5-year average.

Fewer heifers entered the herd during the last half of the year than during the first half. For second-half 1990, nearly 3 million head entered the herd, 32.1 percent of the mid-year replacement heifers. This year the beef cow herd will increase because expanding numbers of heifers entering the cow herd will be coupled with continued declining beef cow slaughter.

Imports Supplement Declining Feeder Cattle Supplies

Even though the 1990 calf crop was the lowest since 1960, the 1990 net feedlot placements remained near-record large as feeder cattle imports rose sharply and calf slaughter continued to decline. Stocker-feeder cattle supplies outside feedlots on January 1 were 1 percent below a year earlier. Yearling supplies were down 1 percent, while calf supplies

declined 2 percent. Last fall large numbers of feeder cattle were again forced off pasture due to deteriorating grazing conditions and cold temperatures. Cattle on feed at the placements are expected to range between 5 to 5.4 million head, which is similar to 1986-88 rather than the 5.7 to 5.9 million of the last 2 years.

This winter, forage prospects, particularly for small grain pasture, have improved in many areas. Consequently, the number of cattle on wheat pasture has been reduced. Most of the cattle remaining on wheat pasture in March will probably be used for wheat grazeout through late spring due to increased acreage reduction requirements and continued poor wheat price prospects. Since feedlot inventories are already large, demand for feedlot placements is likely to drop. Improved moisture conditions and above normal temperatures in most overwintering areas should result in an increased proportion of the available feeder cattle supply remaining on small grain or native pastures until late spring when winter grazing conditions deteriorate.

On-Feed Inventory Large; Marketings Current

Cattle on feed in the 13 quarterly reporting States on January 1 were the most since 1979. Throughout 1990, cattle-on-feed inventories were above a year earlier, yet marketings remained below. In fact, a slower marketing pace has been exhibited since mid-1989. Second-half-1990 net feedlot placements were the largest for this period since 1978. This combination of large placements and slow marketings resulted in a 10-percent increase in the cattle on feed on January 1 and heightened concern over marketings bunched into first-half 1991.

Feedlot inventories continue to be current, with more packer concern about acquiring adequate numbers of market-ready

Table 6--January 1 feeder cattle supply

Item	1989	1990	1991	1991/90
	1,000 head			Percent change
Calves less than 500 lb				
On farms	19,899	19,031	18,720	-1.6
On feed 1/	319	469	487	3.8
Total	19,580	18,562	18,233	-1.8
Steers & heifers 500 + lb 2/				
On farms	23,100	23,939	24,931	4.1
On feed 1/	11,059	11,099	12,175	9.7
Total	12,041	12,840	12,756	-0.7
Total supply	31,621	31,402	30,989	-1.3

1/ Estimated U.S. steers and heifers. 2/ Not including heifers for cow replacement.

Table 7--13-States cattle on feed, placements, marketings, and other disappearance

Year	On feed 1/ 1,000 head	Percent change 2/ Percent	Place- ments 1,000 head	Percent change 2/ Percent	Fed mar- ketings 1,000 head	Percent change 2/ Percent	Other dis- appearance 1,000 head	Percent change 2/ Percent
1988								
I	10,114	5.9	5,824	2.7	5,853	1.8	390	3.7
II	9,695	6.5	5,913	-0.4	5,879	4.1	423	-1.2
III	9,306	3.9	6,031	-9.3	6,261	2.9	225	-7.0
IV	8,851	-4.7	6,655	-2.4	5,466	-3.2	352	2.6
Year	---	---	24,423	-2.6	23,459	1.4	1,390	0.1
1989								
I	9,688	-4.2	6,232	7.0	5,658	-3.3	344	-11.8
II	9,918	2.3	5,212	-11.9	6,040	2.7	410	-3.1
III	8,680	-6.7	5,719	-5.2	5,896	-5.8	227	0.9
IV	8,276	-6.5	7,306	9.8	5,346	-2.2	293	-16.8
Year	---	---	24,469	0.2	22,940	-2.2	1,274	-8.3
1990								
I	9,943	2.6	6,083	-2.4	5,578	-1.4	385	11.9
II	10,063	1.5	5,086	-2.4	5,988	-0.9	400	-2.4
III	8,761	0.9	6,333	10.7	5,741	-2.6	261	15.0
IV	9,092	9.9	7,446	1.9	5,254	-1.7	347	18.4
Year	---	---	24,948	2.0	22,561	-1.7	1,393	9.3
1991								
I	10,937	10.0			5,745 3/	3.0		

1/ Beginning of quarter. 2/ Percent change from previous year. 3/ Expected marketings.

Table 8--7-States cattle on feed, placements, and marketings

Year	On feed 1,000 head	Percent change 1/ Percent	Net placements 1,000 head	Percent change 1/ Percent	Marketings 1,000 head	Percent change 1/ Percent	Other dis- appearance 1,000 head	Percent change 1/ Percent
1989								
Jan.	8,045	-4.4	1,602	2.9	1,677	-4.9	104	-1.9
Feb.	7,970	-2.9	1,495	19.3	1,534	-0.7	115	-8.7
Mar.	7,931	0.2	1,900	9.4	1,579	-0.9	75	-32.4
Apr.	8,252	2.4	1,415	2.4	1,580	-1.8	124	-10.8
May	8,087	3.3	1,460	-28.0	1,752	1.6	164	12.3
June	7,795	-4.2	1,231	-6.7	1,791	4.3	62	-8.8
July	7,235	-6.5	1,228	3.3	1,700	-4.8	63	1.6
Aug.	6,763	-5.3	1,562	-2.0	1,694	-5.4	76	15.2
Sept.	6,631	-4.5	1,906	-11.0	1,579	-6.1	47	-29.9
Oct.	6,958	-6.0	2,581	9.1	1,628	3.3	71	-15.5
Nov.	7,911	-3.5	1,910	21.0	1,490	-1.8	91	-18.8
Dec.	8,331	0.9	1,450	11.0	1,403	-7.5	87	-24.3
1990								
Jan.	8,378	4.1	1,792	11.9	1,644	-2.0	114	9.6
Feb.	8,526	7.0	1,293	-13.5	1,500	-2.2	95	-17.4
Mar.	8,319	4.9	1,782	-6.2	1,618	2.5	120	60.0
Apr.	8,483	2.8	1,252	-11.5	1,554	-1.6	125	0.8
May	8,181	1.2	1,462	0.1	1,776	1.4	150	-8.5
June	7,867	0.9	1,262	2.5	1,819	1.6	73	17.7
July	7,310	1.0	1,443	17.5	1,750	2.9	77	22.2
Aug.	7,003	3.5	1,653	5.8	1,666	-1.7	82	7.9
Sept.	6,990	5.4	2,125	11.5	1,445	-8.5	79	68.1
Oct.	7,670	10.2	2,664	3.2	1,605	-1.4	87	22.5
Nov.	8,729	10.3	1,912	0.1	1,512	1.5	95	4.4
Dec.	9,129	9.6	1,357	-6.4	1,349	-3.8	121	39.1
1991								
Jan.	9,137	9.1	1,673	-6.6	1,707	3.8	118	3.5
Feb.	9,103	6.8						

1/ Percent change is from previous year.

cattle than increasing slaughter weights. Weekly slaughter levels picked up to 650,000 to 660,000 head the first 2 weeks of January. However, it appears the increase was more cleanup from a disrupted holiday slaughter schedule and cold weather in late December, rather than an increase from the larger on-feed inventory. Weekly slaughter dropped to near 610,000 head in late January through mid-February.

Cattle feeders indicated intentions to market 3 percent more cattle this winter than a year ago, however this level appears

optimistic given reduced slaughter levels. Since mid-1989, marketings, as a proportion of cattle supply in the heavier weight groups has changed. Cattle now have a genetic makeup that produces a much larger, growthier animal that is heavier at slaughter. When these cattle are placed on feed at heavier weights, they have a propensity to increase muscle mass than to become over finished. Fed cattle marketings are likely to remain above year-earlier levels throughout 1991. Greatest year-to-year increases should occur in the second half, due primarily to the decreased marketings in second-half 1990.

1991 Fed Beef Production To Rise

Beef production in 1991 is forecast to rise 1 to 2 percent due almost entirely to increased fed-cattle marketings. Marketings are expected to rise from the lower 1990 levels and return to the larger 1987 through 1989 marketings. Cow slaughter is expected to remain near the cyclically low, 1990 level of slightly over 5.9 million head. Cow slaughter declined 6 percent in 1990, with dairy cow slaughter down 8 percent and beef cow slaughter down 5 percent. This year, already lower milk prices are expected to result in year-over-year increases in dairy cow slaughter as the trend for fewer dairy cows resumes. Beef cow slaughter will continue to decline in 1991 as demand for beef cows and replacement heifers remains strong. Nonfed steer and heifer slaughter will continue dropping as stocker-feeder cattle demand remains strong and the number of replacement heifers being retained rises.

Record Weight Trend To Pause

Slaughter weights increased dramatically in the past decade due to genetic changes and increased proportion of fed cattle in the slaughter mix. Commercial dressed weights rose 4 pounds in 1990, to 681 pounds per head. While weights are likely to continue the upward trend as the cattle inventory expands, tight feeder cattle supplies and placement at somewhat lighter weights are expected to result in a pause in slaughter weight increases over the next 2 years.

Record Prices Continue

Continued tight fed cattle supplies and low nonfed slaughter levels, holding down production increases, are expected to result in cattle prices remaining near to slightly above the 1990 record-setting pace. Fed cattle prices are expected to average nearly \$1 per cwt above last year's \$77.40. Prices again will remain strong through spring, weaken with larger supplies in the summer, and then strengthen through late fall. However, the yearend rise will be less than the \$5 increase from last summer to the December 1990 record.

Lower grain prices, strong demand for stocker cattle, and continued high fed cattle prices will keep feeder cattle prices at record levels for the next couple of years. Prices might rise about \$1 above the 1990 price, \$90.86. The highest prices will be set in late winter to early spring due to strong stocker cattle demand, particularly if winter-wheat grazeout programs continue to be attractive.

Strong demand for replacement beef cows and likely reductions in processing beef imports are expected to keep Utility cow prices at a record level also. Uncertainties regarding movement of beef into the Japanese market in 1991 bear watching. Japanese beef storage stocks are high and a new purchasing mechanism begins on April 1. (See the beef trade section for additional discussion.) Cow prices aver-

aged \$53.31 per cwt in 1990 and may average near \$54 in 1991.

Retail Price Rise To Slow

Retail prices for Choice beef set records of \$2.92 a pound in November and \$2.95 in December. For the year, prices rose 6 percent from the 1989 level to average \$2.81. The farm-retail spread this past fall averaged the widest since third-quarter 1989. Retail beef prices last fall outpaced live animal price increases because of reduced beef specializing due to a 3 percent decline in beef production from a year earlier. Increased fed cattle marketings and already reduced live cattle and boxed beef prices are expected to increase beef specializing. However, the spread may remain relatively wide until retailers are more confident in adequate beef supplies to risk the expense of increased beef advertising specials.

Per capita beef consumption may rise this year as population increases and reduced net beef trade partially offset a 1-to 2-percent rise in beef production. Retail price increases are expected to moderate in 1991. Prices rose rapidly in second-half 1990 to the records set in late fall. Prices are expected to decline from the record set in December. Retail prices in 1991 will likely rise 1 to 3 percent from last year's \$2.81. Larger supplies of pork and poultry, together with a sluggish economy and concern about the large consumer debt load might weigh on beef prices this year. This is particularly true if consumers become more pessimistic about the recession impact on their purchasing power. Beef and pork prices, particularly relative to poultry prices, rose sharply in 1990. However, pork prices should fall relative to beef this year, particularly as pork supplies increase in second-half 1991.

By-product Values Decline

The cattle hide and offal value in early 1990 was at the highest level since early 1988 and currently represent more than 10 percent of live value. It has generally been under pressure, despite declining cattle and calf slaughter levels. The December 1990 hide and offal value was about 5 percent below a year earlier. Most of the decrease in hide and offal value can be attributed to less contribution from hides. Other products have also declined, e.g. tallow, meat scraps and tankage. Tallow prices are at low levels and will likely continue depressed as some institutional food servers have moved away from using edible tallow as a cooking medium. Also, relatively low protein feedstuffs prices are expected to limit the price appreciation potential for tankage and meat scrap. Sharp price increases have been seen for beef tongues in recent months compared with year-earlier prices. But, the tongue contribution represents a minor part of the hide and offal value and can not offset the declines in the other products.

Table 9--Federally inspected cattle slaughter

Week ended	Cattle			Steers			Cows								
							Total			Dairy			Dairy/total		
	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991	1989	1990	1991
	Thousands						Percent								
Jan. 5	543	548	495	256	263	245	119	120	96	64	57	50	54	48	52
12	627	622	658	290	282	318	131	147	132	68	69	68	52	47	52
19	654	599	650	313	281	326	129	132	123	65	61	63	50	46	51
26	641	637	617	310	318	310	123	119	116	61	59	60	50	50	52
Feb. 2	625	638	598	300	309	290	114	122	114	60	60	59	53	49	52
9	605	622		300	304		104	115		57	60		55	52	
16	641	601		316	300		119	102		64	53		54	52	
23	628	594		309	300		108	104		62	56		57	54	
Mar. 2	639	592		316	295		114	109		62	56		54	51	
9	600	613		312	312		104	103		58	55		56	53	
16	588	621		288	315		119	104		61	57		51	55	
23	584	609		286	306		114	110		56	56		49	51	
30	587	608		286	307		111	108		57	55		51	51	
Apr. 6	609	592		300	302		118	105		57	51		48	49	
13	646	595		335	303		117	104		56	50		48	48	
20	663	627		332	326		122	102		56	48		46	47	
27	652	625		332	325		122	109		54	51		44	47	
May 4	666	617		326	322		128	102		56	49		44	48	
11	670	684		339	352		118	105		50	48		42	46	
18	675	681		344	354		115	112		50	49		43	44	
25	673	667		342	347		115	109		50	47		43	43	
June 1	589	592		301	311		99	91		42	39		42	43	
8	663	665		328	339		114	104		49	44		43	42	
15	680	674		339	349		113	101		49	41		43	41	
22	658	662		331	341		109	103		48	45		44	44	
29	671	664		329	340		112	108		50	44		45	41	
July 6	564	555		288	289		79	77		37	33		47	43	
13	691	671		335	339		122	113		56	48		46	42	
20	672	673		326	334		115	106		55	45		48	42	
27	638	647		312	333		106	95		52	44		49	46	
Aug. 3	644	617		326	322		104	96		53	44		51	46	
10	673	646		332	332		107	98		54	47		50	48	
17	652	646		315	326		112	104		53	48		47	46	
24	630	634		304	319		114	108		56	50		49	46	
31	646	636		316	311		111	109		57	53		51	49	
Sept. 7	562	572		277	287		97	93		49	44		51	47	
14	657	662		327	323		118	113		58	55		49	49	
21	666	643		316	301		117	112		56	51		48	46	
28	670	656		324	324		120	112		56	51		47	46	
Oct. 5	660	625		310	285		126	111		57	53		45	48	
12	663	635		309	306		128	118		57	53		45	45	
19	648	627		304	298		132	126		57	55		43	44	
26	652	621		297	299		142	131		60	56		42	43	
Nov. 2	643	644		292	299		139	134		61	56		44	42	
9	660	600		310	282		126	130		57	58		45	45	
16	630	610		292	285		139	127		59	54		42	43	
23	635	548		292	284		143	101		60	43		42	43	
30	533	603		262	296		111	129		47	57		42	44	
Dec. 7	660	597		301	294		146	130		62	57		42	44	
14	644	638		299	319		149	128		63	59		42	46	
21	635	635		304	316		133	120		58	57		44	48	
28	625	426		298	219		124	75		53	33		43	44	

1/ Corresponding dates to 1991: 1989, Jan. 7, 1990, Jan. 6.

Veal Consumption Continues Decline

Veal consumption in 1990 was around 1.3 pounds per capita, carcass weight, down from a year ago by about .1 of a pound. Veal calf slaughter declined sharply, off 17 percent and represented only about 4.5 percent of the annual calf crop. As recently as five years earlier, calf slaughter was

over 8 percent of the annual calf crop. Due to the reduced proportion of light weight young calves slaughtered, average dressed weight advanced 19 pounds in 1990 to average 284 pounds per head. Therefore, veal production declined less than calf slaughter, off 7 percent.

Table 10--Commercial calf slaughter and production

Year	Slaughter	Dressed weight	Production
	1,000 head	Pounds	Million pounds
1986			
I	874	148	129
II	836	154	129
III	859	150	129
IV	840	145	122
Year	3,409	149	509
1987			
I	761	148	113
II	651	155	101
III	684	143	98
IV	720	144	104
Year	2,816	148	416
1988			
I	647	150	97
II	568	162	92
III	665	149	99
IV	627	158	99
Year	2,507	154	387
1989			
I	584	156	91
II	488	174	85
III	548	153	84
IV	552	152	84
Year	2,172	158	344
1990			
I	502	157	79
II	412	180	74
III	434	184	80
IV	459	192	88
Year	1,807	178	321

Table 11--Calf slaughter by class under Federal inspection

Year	Bob veal	Fed		Other	Total
	150 lb & below	Formula 150-400 lb	Nonformula 150-400 lb	over 400 lb	
					1,000 head
1986	1,618.6	1,009.3	285.9	281.0	3,194.8
1987	1,207.8	1,002.7	171.4	297.5	2,679.4
1988	1,065.9	1,003.3	155.9	185.1	2,410.2
1989					
Jan.	83.4	83.6	10.3	18.3	195.6
Feb.	75.7	76.6	7.7	15.3	175.3
Mar.	83.1	84.6	9.9	16.7	194.3
Apr.	46.3	74.5	7.3	23.9	152.0
May	54.7	77.9	9.3	15.4	157.3
June	56.4	81.6	8.1	15.1	161.2
July	97.1	82.8	10.3	16.6	206.8
Aug.	87.8	76.1	8.3	16.9	189.1
Sept.	77.3	68.4	10.6	16.7	173.0
Oct.	80.6	86.7	11.2	12.2	190.7
Nov.	81.6	70.5	10.5	12.4	175.0
Dec.	74.2	70.5	8.9	13.3	166.9
Year	898.2	933.8	112.4	192.8	2,137.2
1990					
Jan.	73.4	77.5	12.1	11.8	174.8
Feb.	58.0	66.1	8.1	12.9	145.1
Mar.	66.4	79.6	8.1	11.0	165.1
Apr.	42.8	67.3	8.2	9.4	127.7
May	38.9	81.7	7.3	8.9	136.8
June	41.4	69.1	9.9	11.2	131.6
July	53.7	69.0	6.5	9.5	138.7
Aug.	56.6	68.8	9.0	12.5	146.9
Sept.	51.5	60.4	7.2	13.2	132.3
Oct.	57.0	77.3	9.3	14.1	157.7
Nov.	59.5	71.3	7.6	10.7	149.1
Dec.	57.4	63.2	5.9	10.2	136.7
Year	656.6	851.3	99.2	135.4	1,742.5

Table 12--Beef, Choice Yield Grade 3: Retail, wholesale, and farm values, spreads, and farmers' share 1/

Year	Retail price 2/	Wholesale value 3/	Gross farm value 4/	By-product allowance 5/	Net farm value 6/	Farm retail-spread			Farmers' Share 7/
						Total	Wholesale-retail	Farm wholesale	
									Percent
1986	226.8	146.5	140.0	15.0	125.0	101.8	80.3	21.5	55
1987	238.4	160.0	157.6	18.9	138.7	99.7	78.4	21.3	58
1988	250.3	169.4	169.4	21.1	148.3	102.0	80.9	21.1	59
1989	265.7	176.8	177.6	20.0	157.6	108.1	88.9	19.2	59
I	260.7	177.3	179.6	19.7	159.9	100.8	83.4	17.4	61
II	267.0	180.4	179.5	19.3	160.2	106.8	86.6	20.2	60
III	268.0	172.5	171.3	20.1	151.2	116.8	95.5	21.3	56
IV	266.9	176.8	180.1	21.2	158.9	108.0	90.1	17.9	60
1990	281.0	190.0	188.9	20.5	168.4	112.6	91.0	21.6	60
I	272.6	186.9	189.5	21.5	168.0	104.6	85.7	18.9	62
II	281.2	189.8	188.0	20.7	167.3	113.9	91.4	22.5	59
III	280.4	186.1	184.7	20.0	164.7	115.7	94.3	21.4	59
IV	289.9	197.2	193.4	19.8	173.6	116.3	92.7	23.6	60
1991									
Jan.	294.9	193.5	190.7	20.4	170.3	124.6	101.4	23.2	58

1/ Series revised August 1990. 2/ Estimated weighted-average of BLS prices of retail cuts from Choice Yield Grade 3 carcass. 3/ Value of wholesale quantity equivalent to 1 lb of retail cuts. A wholesale equivalent of 1.142 is used. 4/ Market value to producer for 2.4 lb of live animal, equivalent to 1 lb of retail cuts. 5/ Portion of gross farm value attributed to edible and inedible by-products. 6/ Gross farm value minus farm by-product allowance. 7/ Percent net farm value is of retail price.

High feeder cattle prices in 1991 are expected to continue to bid increasing numbers of calves out of veal feeding and slaughter channels. As a result, calf slaughter is expected to continue declining, but at a slower rate than last year. Calf slaughter in 1991 likely will represent only about 4.2 to 4.4 percent of the calf crop. The number of higher-valued for-

mula-fed veal calves are expected to remain fairly steady and thus represent an expanding proportion of the declining number of calves slaughtered. Veal consumption is expected to be around 1.2 pounds per capita, carcass weight, in 1991.

U.S. Beef and Cattle Trade

U.S. Beef and Veal Imports To Decline

U.S. beef and veal imports in 1991 are forecast to decline about 4 percent. The major suppliers are Australia and New Zealand, accounting for about 46 and 25 percent of imports last year, respectively. Canada was the third largest supplier with about 10 percent. The 1991 trigger level for meat under the Meat Import Law is 1,318.5 million pounds, product weight, a reduction by 3.5 percent over the 1990 trigger level.

Imports from Australia are forecast to decline in 1991 from the highs of last year, when U.S. imports of Australian beef and veal rose about 33 percent. Dry weather in early 1990, followed by heavy rains and flooding in March and April, prompted increased slaughter. Moreover, the rains provided excellent seasonal conditions and thus heavier slaughter weights during the remainder of the year. Attractive U.S. prices, a slowdown in Japanese imports from all sources, and lower New Zealand exports to the U.S. diverted more Australian beef to the U.S. market during 1990.

New Zealand's 1990 output and exports were down as they are recovering from the effects of drought. Their inventory is building and some increase in slaughter and exports is forecast for 1991.

U.S. imports of beef produced in Brazil after June 1, 1990, ceased because Brazil lost residue certification from the USDA Food Safety and Inspection Service. Because of lack of funds for its laboratories, Brazil did not produce residue samples for products to be exported to the United States. Under U.S. law, countries without an acceptable residue testing program can not export to the United States. Both Argentina and Brazil have foot-and-mouth disease problems. Thus, only cooked meat in air-tight containers can be imported by the United States from these countries. Imports

from Argentina have increased as a result of the cutoff of Brazilian supplies.

U.S. Beef and Veal Export Gains Uncertain

Little growth is likely in 1991 for U.S. beef and veal exports. About 57 percent of U.S. beef and veal exports went to Japan last year. Beginning in April 1991, beef exports to Japan will no longer be regulated by Japan's Livestock Industry Promotion Corporation (LIPC) nor be under a quota agreement. LIPC surcharges will be eliminated. However, the ad valorem import tariff will be increased from 25 to 70 percent in April 1991, then reduced to 60 percent in 1992 and 50 percent in 1993.

Japanese imports are likely to remain large during the first quarter of 1991, as they attempt to fulfill the remaining quota for 1990/91. Large Japanese stocks are still burdensome as wholesale beef prices have declined while retail prices have not. It is uncertain what will happen in 1991 after liberalization. A likely scenario is for Japanese imports to drop while stocks are worked down and the market adjusts to the new trading regulations. Imports are expected eventually to begin to grow along with increases in per capita con

In 1988, the United States became Canada's major beef supplier, surpassing Australia. U.S. exports to Canada increased substantially in 1990, fueled by demand for high-quality portion control/boxed beef for the foodservice industry. A portion of the increase in 1990 is due to changes in reporting; Canadian import statistics are now being accepted as U.S. export statistics. U.S. exports to Canada prior to 1990 appear to have been underreported.

There has been a shift in Canada's beef industry from the East to the West, mainly Alberta. Fed cattle inventories have declined in Eastern Canada while increasing in the West. Previously, Western Canada shipped large numbers of feeder cattle to be fed in Eastern Canada. However, now more of the Western feeder cattle are fed locally or exported to the United States. New slaughter facilities have been built in the West and older, less efficient slaughter plants in the East have closed.

Only Canadian graded beef can cross provincial borders. Canadian grading standards favor a leaner animal. These factors give an edge to U.S. "no roll" beef which is ungraded, competitively priced, high-quality U.S. beef, which is exported mainly into Eastern Canada. U.S. beef exports to Canada are forecast to continue to increase in 1991.

Record Live Cattle Imports in 1990

Mainly because of relatively higher prices in the United States, record numbers of cattle were imported in 1990. U.S. live cattle imports, predominately feeder or slaughter cattle from Mexico or Canada, are forecast to remain near the

Table 13--U.S. beef and veal trade, carcass weight 1/

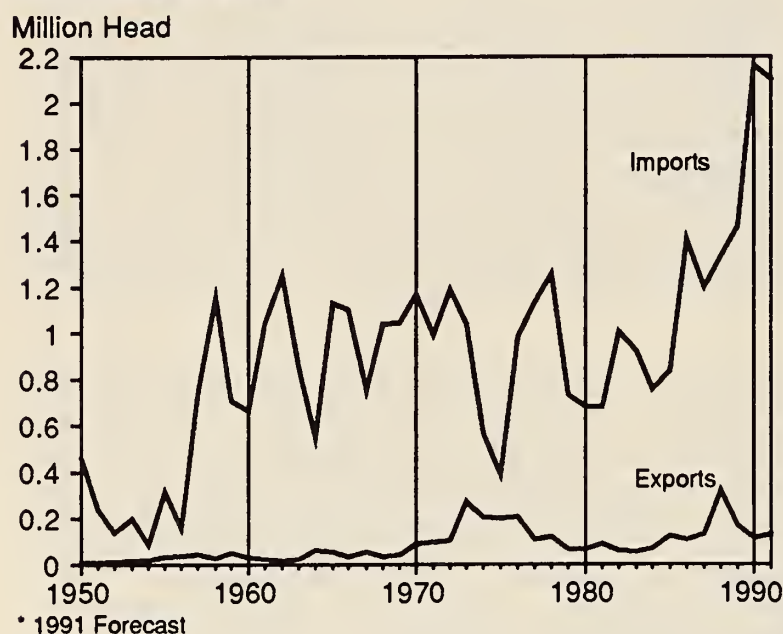
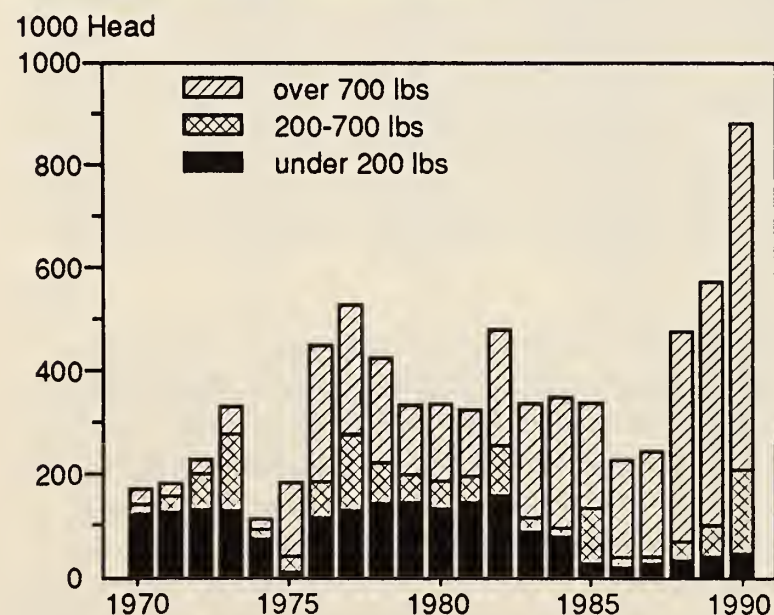
Country or area	Annual 1989	Annual 1990	Percent change
<hr/>			
	Million pounds		Percent
Imports			
Australia	818.4	1,084.4	32.5
New Zealand	658.4	577.9	-12.2
Canada	239.3	222.4	-7.1
Brazil	78.2	43.8	-44.0
Argentina	189.3	209.2	10.5
Central America	137.7	147.8	7.4
Other	57.2	70.5	23.2
Total	2,178.4	2,355.9	8.1
Exports			
Japan	715.5	574.4	-19.7
Canada	98.2	191.1	94.7
Caribbean	22.6	24.6	8.6
Korea, S.	57.7	97.7	69.3
Other	128.5	118.2	-8.0
Total	1,022.6	1,006.0	-1.6

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

Table 14--U.S. live cattle trade 1/

Country or area	Annual 1989	Annual 1990	Percent change
Imports			
Mexico	873.6	1,261.2	44.4
Canada	584.7	873.8	49.4
Other	1.1	0.0	-99.6
Total	1,459.4	2,135.0	46.3
Exports			
Mexico	124.9	64.2	-48.6
Canada	23.7	34.6	46.2
Other	20.6	21.1	2.7
Total	169.1	119.9	-29.1

1/ May not add due to rounding. Percent change calculated from unrounded data.

Figure 1
U.S. Cattle TradeFigure 2
Imports of Cattle From Canada

record year-earlier level as demand and prices are likely to remain strong in 1991.

About 98 percent of the cattle imports from Mexico are feeder steers in the 200-700 pound weight class. Mainly

Figure 3

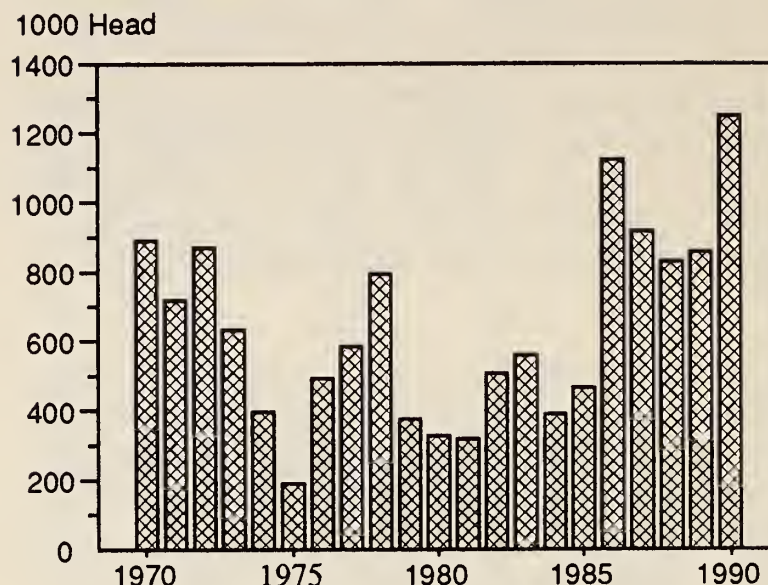
Imports of Feeder Steers, 200-700 lbs,
From Mexico

Table 15--Imports of feeder cattle and calves and hogs from Canada and Mexico

Year	Feeder cattle and calves		Hogs
	Canada	Mexico	Canada
Number			
1989			
Jan.	52,285	105,822	162,762
Feb.	34,515	146,996	103,245
Mar.	39,386	132,921	144,106
Apr.	46,410	108,428	65,383
May	61,756	9,401	74,488
June	58,534	233	70,821
July	19,379	3,429	35,796
Aug.	51,205	4,172	111,765
Sept.	50,484	716	74,946
Oct.	65,841	509	79,625
Nov.	54,132	132,404	61,972
Dec.	40,861	228,357	88,255
Total	573,408	873,388	1,073,164
1990			
Jan.	53,709	126,109	119,009
Feb.	68,728	117,738	91,116
Mar.	74,048	122,648	68,791
Apr.	87,155	125,692	90,417
May	90,785	117,799	83,125
June	79,724	71,359	61,262
July	46,664	46,070	61,829
Aug.	57,177	18,022	54,927
Sept.	87,116	39,222	52,186
Oct.	100,289	68,756	74,108
Nov.	61,852	206,038	64,515
Dec.	47,221	201,654	64,992
Total	854,468	1,261,107	886,277

light-weight cattle are brought in and, after a period of time on pasture, are placed in feedlots. Prior to the autumn of 1988, Mexico restricted exports to steers from northern Mexican states. Currently, steers from other parts of Mexico are allowed to be exported.

The Mexican cattle inventory is down because of drought, and consumption is declining because of reduced consumer purchasing power. Beef is relatively high priced in Mexico and is consumed by only a small percentage of the population. Most consumption is in the northern states. Consumers are substituting less expensive meats such as pork and poultry for beef.

U.S. imports of Mexican cattle are likely to remain high in 1991. However, the reduced inventories and the possibility of some herd rebuilding with improved weather conditions could keep exports from expanding.

Because of the need for hard currency to service Mexico's external debt, the Mexican Government is fostering a more conducive atmosphere for exports. Restrictive quotas and export permits for cattle exports were discontinued. The export tariff on live cattle was reduced in September 1990 from 10 percent (minimum \$30 per head) to 5 percent, and will be reduced in September 1991 to 1.67 percent.

U.S. imports of cattle from Canada were at record levels in 1990. In January-November 1990, 75 percent of the cattle imported from Canada were in the over 700 pound class. About 18 percent were 200-700 pounds, and 5 percent were under 200 pounds. Of the remaining 2 percent, almost all were dairy cows, very few being breeding animals. There has been a substantial shift in cattle exports by weight class. Ten years ago about 38 percent of the cattle were in the under 200 pound class and 43 percent were above 700 pounds. Strong feeder cattle prices, the national tripartite stabilization program payouts on slaughter cattle, and other government programs all encourage producers to market cattle at heavier weights increasing the supply of feeder and slaughter cattle.

There also has been a shift in Canadian production and exports by Province. Over the past 4 years, inspected cattle slaughter in Alberta increased by almost 20 percent, while, with slaughter plants closing, output in Manitoba and Ontario fell 75 and 32 percent, respectively. Since 1986, exports of slaughter cattle to the U.S. increased from Alberta by 629 percent and Manitoba by 438 percent, according to Canadian statistics. The large increase in feeder cattle exports in 1990 was mainly from Manitoba. Previously Alberta had supplied most of the feeder cattle exported and British Columbia, most of the slaughter cattle.

The Canadian cattle inventory began to expand during 1987, prior to the United States' cyclic expansion. With high feeder and slaughter cattle prices in 1990, continued Cana-

dian cattle inventory increases are likely this year. While total slaughter in Canada is forecast by Agriculture Canada to decline 1 percent in 1991, beef output is forecast to increase 1 percent because of heavier weights. Higher cattle prices in the United States, compared with similar markets in Canada, continue to draw in Canadian cattle. In 1991, continued high cattle prices are forecast, thus U.S. imports of Canadian cattle are likely to remain near the 1990 record level.

Sheep and Lambs

The sheep and lamb inventory on January 1, 1991, was 11.2 million head, a decline of about 1 percent from 1990. This drop in the inventory signals the end of the growth phase of a lamb cycle that began in 1986. This reduction in inventory is a reaction to the lowest returns that the sheep producers have received since the early 1980's. These low returns are expected to continue through 1991, further reducing the inventory for next year.

Stock sheep inventory dropped 1 percent on January 1, 1991 to 9.5 million head. The established breeding flock, the ewes one year old and older, were down 2 percent at 7,429,000 head. Breeding replacement ewe lambs were up 1 percent from 1990 levels. Wethers and rams, one year old and older were down 2 percent and wether and ram lambs were up 13 percent. Without a dramatic change in the number of flock replacement lambs that actually enter the breed-

Table 16--Sheep inventory by classes, U.S., January 1

Class	1989	1990	1991	1991/90
			1,000 head	Percent
All sheep and lambs 1/	10,858	11,363	11,200	-1
On feed	1,646	1,762	1,730	-2
Stock sheep	9,212	9,601	9,471	-1
Lambs				
Ewes	1,344	1,324	1,342	1
Wethers and rams	346	312	351	13
One year old and older:				
Ewes	7,187	7,609	7,429	-2
Wethers and rams	334	356	349	-2

1/ New-crop lambs are not included.

Table 17--Balance sheet for sheep and lambs, U.S.

Year	On farms Jan. 1	Lamb crop	Net exports	Total slaughter	Deaths	Adjustment factor	On farms Dec. 31
1,000 head							
1980	12,699	8,257	103	5,742	1,920	-244	12,947
1981	12,947	8,820	214	6,197	1,853	-506	12,997
1982	12,997	8,580	271	6,643	1,875	-648	12,140
1983	12,140	8,214	213	6,792	1,608	-182	11,559
1984	11,559	7,837	301	6,900	1,724	245	10,716
1985	10,716	7,500	338	6,300	1,385	-48	10,145
1986	10,145	7,396	100	5,762	1,269	162	10,572
1987	10,572	7,289	15	5,312	1,195	-394	10,945
1988	10,945	7,206	138	5,392	1,209	-554	10,858
1989	10,858	7,725	188	5,559	1,205	-268	11,363
1990	11,363	7,704	448	5,745 */	1,200 */	-474	11,200
1991	11,200						

* Estimated.

ing flock, there should not be a large drop in 1992 inventory. This indicates production for 1991 should remain near 1990 levels.

Production for 1991 is expected to be about 360 million pounds, up one-half a percent from 1990. This slight increase in production over 1990 levels is expected for several reasons. The lambing rate, lambs per 100 ewes, dropped from 107 in 1989 to 101 in 1990, the lowest since 1985. If the lambing rate returns to the 5 year average of slightly under 104, then the lamb crop should be the same as 1990. Slaughter levels will be held up as fewer lambs are expected to be retained for the breeding flock in 1991 and with a higher culling rate on the present breeding flock. Although production in 1991 will remain high, the productive capacity of the flock in the future will be diminished.

Production in the first quarter of 1991 is expected to be about 95 million pounds, up 2 percent from a year ago. First quarter production is expected to increase even though sheep and lambs on feed and new crop lambs were down 2 percent on January 1, 1991, because of the timing of the religious holidays in 1991. The spring religious holidays occur in late March in 1991, as opposed to mid-April in 1990. Because of the shift in the slaughter patterns caused by these floating holidays, second quarter lamb and mutton production is expected to decline 3 percent from 1990 levels, to 87 million pounds. Third and fourth quarter 1991 lamb and mutton production is expected to be up slightly from 1990 at 87 and 91 million pounds, respectively.

Slaughter lamb prices at San Angelo, Texas, in 1991 are expected to average near the \$55.54 average for 1990. First-quarter slaughter lamb price at San Angelo should strengthen toward late February and March as the spring religious holiday demand increases. Prices are expected to average \$54 to \$56 dollars for the first quarter of 1991. Second-quarter

Table 18--Commercial sheep and lamb slaughter 1/ and production

Year	Lambs	Sheep	Total	Dressed weight	Production
-----1,000 head-----			Lb	Mil lb	
1988					
I	1,292	62	1,354	63	85
II	1,178	82	1,260	63	80
III	1,256	80	1,336	60	80
IV	1,265	79	1,344	63	84
Year	4,991	303	5,294	62	329
1989					
I	1,308	65	1,373	64	88
II	1,198	96	1,294	62	80
III	1,265	100	1,365	59	81
IV	1,351	83	1,434	64	92
Year	5,122	344	5,466	62	341
1990					
I	1,356	67	1,423	65	93
II	1,313	92	1,405	64	90
III	1,279	89	1,368	62	85
IV	1,368	85	1,453	63	92
Year	5,316	333	5,649	64	360

1/ Classes estimated.

prices are expected to average in the upper \$50's to lower \$60's, before declining to the low \$50's for the remainder of the year.

Hogs

Farrow-to-finish hog producers' returns in 1990 were favorable and are expected to remain so in 1991. Barrow and gilt prices are expected to average in the low-to mid-\$50's per cwt. Total cash expenses are projected to average around \$40 per cwt of hog produced. Capital replacement costs are expected to average about \$6 per cwt. The favorable returns

Table 19--Federally inspected hog slaughter

Week ended 1/	1988	1989	1990	1991

Thousands				
Jan.				
5	1,726	1,419	1,337	1,346
12	1,766	1,719	1,763	1,814
19	1,605	1,679	1,674	1,710
26	1,543	1,647	1,684	1,606
Feb.				
2	1,535	1,631	1,647	1,566
9	1,545	1,656	1,656	
16	1,542	1,678	1,677	
23	1,595	1,665	1,624	
Mar.				
2	1,610	1,621	1,713	
9	1,674	1,716	1,605	
16	1,639	1,703	1,707	
23	1,631	1,601	1,631	
30	1,599	1,648	1,591	
Apr.				
6	1,573	1,761	1,661	
13	1,655	1,780	1,642	
20	1,660	1,813	1,594	
27	1,695	1,764	1,594	
May				
4	1,654	1,732	1,579	
11	1,634	1,654	1,586	
18	1,577	1,632	1,528	
25	1,533	1,618	1,523	
June				
1	1,323	1,343	1,236	
8	1,489	1,589	1,460	
15	1,513	1,589	1,452	
22	1,503	1,533	1,472	
29	1,537	1,500	1,402	
July				
6	1,330	1,244	1,191	
13	1,537	1,557	1,461	
20	1,542	1,518	1,430	
27	1,456	1,501	1,361	
Aug.				
3	1,528	1,543	1,463	
10	1,571	1,612	1,471	
17	1,513	1,615	1,607	
24	1,563	1,610	1,607	
Sept.				
31	1,607	1,713	1,641	
7	1,517	1,545	1,641	
14	1,807	1,888	1,747	
21	1,868	1,853	1,722	
28	1,803	1,785	1,676	
Oct.				
5	1,830	1,810	1,695	
12	1,838	1,810	1,628	
19	1,845	1,797	1,665	
26	1,895	1,739	1,624	
Nov.				
2	1,908	1,812	1,662	
9	1,827	1,810	1,761	
16	1,920	1,791	1,768	
23	1,562	1,901	1,480	
30	1,956	1,564	1,841	
Dec.				
7	1,887	1,908	1,814	
14	1,800	1,832	1,825	
21	1,668	1,716	1,763	
28	1,420	1,521	1,252	

1/ Corresponding dates to 1991: 1988, Jan. 9; 1989, Jan. 7; 1990, Jan. 6.

Table 20--Commercial hog slaughter 1/ and production

Year	Barrows & gilts	Sows	Boars & Stags	Total	Dress- ed wt.	Comm'l- prod.
	----- 1,000 hd.-----				lb.	Mil lb.
1987						
I	19,007	763	170	19,940	178	3,540
II	17,877	846	189	18,912	176	3,327
III	18,199	1,010	187	19,396	174	3,383
IV	21,776	888	170	22,834	178	4,061
Year	76,859	3,507	716	81,082	177	14,311
1988						
I	20,282	889	189	21,360	177	3,790
II	19,736	941	200	20,877	179	3,727
III	19,967	1,182	228	21,377	177	3,775
IV	22,932	1,053	195	24,180	179	4,331
Year	82,917	4,065	812	87,794	178	15,623
1989						
I	20,739	942	195	21,876	178	3,885
II	20,687	1,038	219	21,944	179	3,929
III	20,180	1,178	209	21,567	176	3,790
IV	22,047	1,069	188	23,304	178	4,155
Year	83,653	4,227	811	88,691	178	15,759
1990						
I	20,784	887	208	21,879	178	3,902
II	19,096	940	221	20,257	180	3,645
III	19,108	1,030	213	20,351	179	3,639
IV	21,492	952	185	22,629	181	4,105
Year	80,480	3,809	827	85,116	180	15,291

1/ Classes estimated.

should encourage producers to expand breeding herds this year.

Pork production in January was about the same as a year ago, when adjusted for the additional slaughter day. Heavier dressed weights offset the decline in the number of hogs slaughtered. However, dressed weights are declining and hog slaughter through mid February is running 2 to 3 percent below a year ago. So production in the first quarter is projected to be about 1 percent below a year ago. For all of 1991, pork production is projected to be about 2 percent higher than the 15.3 billion pounds during 1990.

Through mid February, hog prices are averaging about \$3 to \$4 per cwt higher than in 1990. However, prices are projected to be lower than a year ago in second and third quarters and average in the low-to mid-\$50's, compared with \$54 last year.

U.S. Pork Trade

Pork Imports

U.S. pork imports for 1990 were 898 million pounds, virtually unchanged from 1989. Imports from the European Community and Hungary were quite strong but offset by smaller shipments from Poland, Yugoslavia, and Canada.

Much of this weakness will continue to keep import growth in check through the first half of 1991. However, Danish and Canadian production are expected to increase later in the year and could help boost total U.S. pork imports about 5 percent.

Live Hog Trade

Live hog imports from Canada were about 890,000 head during 1990, 17 percent below 1989. All the decline was in slaughter hogs, the number of imported pigs weighing less than 50 kilograms (110 pounds) increased 20 percent, to 204,000 head. Approximately 23 percent of total hog imports were lighter-weight hogs, up from 16 percent for the same period in 1989.

Pork Exports

U.S. pork exports in 1990 lagged behind 1989. Exports to all sources were 238 million pounds, 9 percent below the previous year. Exports to Japan further slackened, falling 15 percent below 1989. Although there was a slight increase in

Table 21--Pork: Retail, wholesale, and farm values, spreads, and farmers' share

Year	Retail price 1/	Wholesale value 2/	Gross farm value 3/	By-product allowance 4/	Net farm value 5/	Farm retail spread			Farmers' share 6/
						Total	Wholesale-retail	Farm-wholesale	
-----Cents per pound-----									Percent
1986	178.4	110.9	87.4	5.0	82.4	96.0	67.5	28.5	46
1987	188.4	113.0	87.9	5.2	82.7	105.7	75.4	30.3	44
1988	183.4	101.0	73.9	4.5	69.4	114.0	82.4	31.6	38
1989	182.9	99.2	75.0	4.6	70.4	112.5	83.7	28.8	38
I	180.0	92.9	69.4	4.3	65.1	114.9	87.1	27.8	36
II	178.6	94.6	71.5	4.4	67.1	111.5	84.0	27.5	38
III	183.9	100.8	78.2	4.8	73.4	110.5	83.1	27.4	40
IV	188.9	108.4	80.8	4.7	76.1	112.8	80.5	32.3	40
1990	212.6	118.3	92.6	5.4	87.2	125.4	94.3	31.1	41
I	196.2	107.1	84.5	5.1	79.4	116.8	89.1	27.7	40
II	208.4	122.5	100.1	5.9	94.2	114.2	85.9	28.3	45
III	222.6	122.8	98.3	5.8	92.5	130.1	99.8	30.3	42
IV	223.1	120.5	87.6	5.1	82.5	140.6	102.6	38.0	37
1991									
Jan.	216.1	109.7	86.5	5.1	81.4	134.7	106.4	28.3	38

1/ Estimated weighted-average of BLS prices of retail cuts from pork carcass. 2/ Value of wholesale quantity equivalent to 1 lb of retail cuts. A wholesale-carcass equivalent of 1.06 is used. 3/ Market values to producer for 1.7 lb of live animal, equivalent to 1 lb of retail cuts. 4/ Portion of gross farm value attributable to edible and inedible by-products. 5/ Gross farm value minus by-product allowance. 6/ Percent net farm value is of retail price.

USITC Rules Imports of Canadian Pork No Threat to U.S. Hog Producers

On January 22, the Binational Dispute Settlement Panel responded to Canada's appeal of the U.S. International Trade Commission's (USITC) reaffirmation of threat of injury to U.S. hog producers from imports of fresh, chilled, and frozen pork from Canada. (See **Livestock and Poultry Situation and Outlook**, November 1990). In ordering a remand, the Panel indicated that the decision was not based on enough facts and requested that it narrow the focus of the probe to pork imports and ignore the potential to shift from pork to live hogs.

On February 12, 1990, the USITC ruled that U.S. hog producers are not threatened with injury from imports of fresh, chilled, or frozen pork from Canada. In the absence of any appeals, this ruling will lead to the eventual negation of the countervailing duty and will require that the U.S. refund the deposits collected since the duty was imposed in May 1989.

The exact timetable is unclear and will depend upon what appeal process is selected. If no appeals are filed, a notice of closure of Panel will be filed and there will be a 30-day period to mount a constitutional challenge to the law before either the Court of International Trade or U.S. Court of Appeals. Currently, the National Pork Producers Council has not indicated that they will appeal, but rather would like Congressional hearings to determine the power of the Settlement Panel.

If there is no challenge to the USITC ruling, it will be necessary to reconcile the USITC injury finding with the level-of-support decision of the U.S. Department of Commerce (USDOC). Canada had filed an appeal of the U.S. USDOC recalculation of the duty. (See **Livestock and Poultry Situation and Outlook**, January 1991) The Binational Panel was expected to issue a ruling in mid-March 7.

pork exports to Mexico in November and December, shipments for the year remain significantly below 1989.

Exports in 1991 have the potential to increase to 240 million pounds. However, exports will likely remain low through the first half of 1991 as pressure from large beef supplies

Table 22--U.S. pork trade, carcass weight 1/

Country or area	Annual 1989	Annual 1990	Percent change
<hr/>			
	Million pounds		Percent
Imports			
Canada	453.2	437.1	-3.6
Denmark	198.4	273.2	37.7
Poland	112.8	66.6	-40.9
Hungary	26.2	33.1	26.6
Other	105.1	87.8	-16.4
Total	895.7	897.9	0.2
Exports			
Japan	147.8	125.5	-15.1
Canada	13.0	22.8	75.6
Mexico	60.2	38.3	-36.4
Caribbean	15.0	15.4	2.6
Other	26.5	36.4	37.4
Total	262.4	238.4	-9.1

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

Table 23--U.S. live hogs trade 1/

Country	Annual 1989	Annual 1990	Percent change
<hr/>			
	1,000 head		Percent
Imports			
Canada	1073.2	886.3	-17.4
(Under 110 lb)	169.4	203.7	20.2
Total	1073.6	890.3	-17.1
Exports			
Mexico	78.1	42.0	-46.3
Other	15.2	14.7	-3.6
Total	93.3	56.7	-39.3

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

limit Japanese pork imports. Some export growth is expected later in the year as Japanese pork imports increase and U.S. prices fall. However, increased second half Danish production and lower European Community pork prices will probably increase competition from Danish pork.

Poultry and Eggs

Broilers

Slower Expansion Expected in 1991

Strong profits in 1990 will encourage more production in 1991. Annual net returns to broiler producers averaged 8 cents per pound in 1990, the third highest since the record net returns in 1986. Despite record exports, broiler prices were lower than year-earlier levels in 1990, the same period when increases in beef and pork prices were significantly high. Lower broiler prices and increased producer caution, due to uncertainties about the economy, are expected to slow expansion in 1991. Following a 7 percent increase in 1990, broiler production in 1991 is expected to increase by 5 percent, similar to expansion rates experienced in 1984 and 1986. Ready-to-cook production will probably reach about 19.5 billion pounds.

First-quarter production is estimated to increase by 5-6 percent, based on the November-January chick hatch, compared with a 9 percent expansion rate in the first quarter of 1990. Second-quarter production will probably grow by about 6-7 percent, as producers prepare for seasonal increases in demand. Production increases in the second half of 1991 are expected to slow from the first half and from the 7 percent growth during the same period a year earlier.

Broiler consumption will continue to grow in 1991, with total domestic disappearance of approximately 18.6 billion pounds expected, 95 percent of total production. Attractive broiler prices and the increasing availability of further-processed broiler products catering to the needs of today's consumers will encourage this increase. Per capita consumption is expected to be about 74 pounds, compared with 70 pounds in 1990. Increases in per capita broiler consumption will probably be slower during the second half. This reflects of 1991 relative to the year-earlier second half. This reflects projections of slower growth in production, particularly during the fourth quarter, when pork price declines are expected.

Slightly Lower Prices Are Likely

Increased supplies of broilers and other meats and expected reduced broiler exports will probably keep broiler prices

Table 24--Federally inspected young chicken slaughter, 1988-90

Year	Number	Average weight	Live weight	Certified RTC
	Million	Pounds	Million pounds	
1989:				
I	1,310	4.35	5,698	4,129
II	1,394	4.33	6,032	4,389
III	1,412	4.29	6,052	4,395
IV	1,383	4.41	6,101	4,420
Year	5,499	4.34	23,882	17,334
1990:				
I 1/	1,412	4.39	6,201	4,495
II 1/	1,470	4.36	6,416	4,657
III 1/	1,484	4.29	6,368	4,630
IV 1/	1,471	4.45	6,542	4,790
Year	5,837	4.37	25,527	18,572

1/ Preliminary.

Table 25--Broiler chicks hatched and pullet chicks placed in hatchery supply flocks, 1988-91

Month	Broiler-type chicks			Pullet chicks placed in broiler hatchery supply flocks					
	Monthly placements			Cumulative placements 1/					
	1988	1989	1990	1988	1989	1990	1989	1990	1991
Thousands									
January	468,333	482,802	516,289	3,593	3,982	4,587	32,512	34,352	37,096
February	432,813	443,923	472,853	4,186	4,173	4,340	32,484	34,764	37,526
March	483,353	503,506	543,088	4,616	4,662	4,924	32,566	35,277	37,708
April	464,386	494,911	535,827	4,019	4,385	4,592	33,046	35,882	38,011
May	487,027	524,170	553,689	4,274	4,535	5,089	33,150	36,416	38,551
June	473,782	510,554	540,923	3,944	4,528	5,134	32,327	35,762	38,341
July	473,394	513,035	541,028	3,735	4,205	4,438	32,602	35,799	38,489
August	479,734	510,272	540,814	4,199	4,807	4,604	32,310	35,851	
September	455,183	485,067	508,575	4,073	4,587	4,890	32,539	35,663	
October	456,819	484,375	510,309	4,290	4,707	4,880	33,466	36,382	
November	438,543	469,641	490,178	3,793	4,008	4,714	33,652	36,167	
December	489,033	522,093	547,067	4,294	4,422	4,740	34,114	36,669	

1/ 7-14 months earlier.

Table 26--Broilers: Eggs set and chicks placed weekly 1/

Date	Eggs set			Chicks placed		
	1990	1991	Change	1990	1991	Change
---Thousands--- Percent						
Jan.						
5	129,882	135,172	4.1	105,089	107,681	2.5
12	131,418	134,309	2.2	104,434	109,051	4.4
19	130,653	134,213	2.7	104,245	110,019	5.5
26	130,967	136,086	3.9	104,404	108,632	4.0
Feb.						
2	130,429	138,257	6.0	105,703	107,018	1.2
9	130,971	139,459	6.5	105,123	108,216	2.9
16	134,086			105,027		
23	135,441			105,387		
Mar.						
2	136,247			105,774		
9	136,950			107,839		
16	137,032			109,535		
23	136,015			110,082		
30	138,522			111,603		

1/ 15 States: Ala., Ark., Calif., Del., Fla., Ga., Md., Miss., N.C., Pa., S.C., Tenn., Tex., Va., and W. Va.

from rising to levels above a year earlier. The 12-city composite wholesale price for broilers in 1991 is expected to average in the mid-50's, about a cent below the 1990 average of around 55 cents a pound. Quarterly average prices, expected to be fairly stable in the low-to-mid 50-cents-per-pound range, are estimated to average below year-earlier levels except in the fourth quarter. Average retail prices in 1991 will probably range in the high 80's, slightly lower than year-earlier levels.

Net Returns Expected To Remain Strong

Another profitable year is expected for broiler producers in 1991. The average annual net returns to producers in 1991 is expected to remain near the year-earlier average of about 8 cents a pound, reflecting lower average feed costs and a slightly lower average broiler price. Net returns in the first half of 1991 are expected to average below last year due to expected lower broiler prices during that period. Even with about a 3 percent drop in corn and soybean meal costs, first-quarter net returns will probably average around 6-7 cents a

Table 27--Young chicken prices and price spreads

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Cents/lb.													
Farm price 1/:													
1988	26.8	25.9	27.4	28.3	33.7	37.4	41.5	42.3	39.1	35.7	34.8	35.4	34.0
1989	34.6	34.7	38.6	39.1	44.6	42.2	38.7	35.7	36.1	30.2	29.4	28.6	36.0
1990	30.7	33.5	36.4	33.2	35.2	34.1	36.9	33.2	35.2	29.0	28.2	28.8	32.9
1991	30.9												
Wholesale RTC 12-city avg. 2/:													
1988	43.9	44.9	48.4	48.7	56.6	61.5	66.5	68.9	62.8	57.7	57.1	58.8	56.3
1989	58.0	58.0	62.1	63.5	70.4	67.4	62.0	57.3	59.9	51.7	49.2	48.4	59.0
1990	51.7	57.4	60.4	55.3	57.9	56.4	59.5	54.9	57.4	48.8	48.0	49.6	54.8
1991	51.7												
U.S. avg. retail price:													
1988	74.0	74.5	75.3	76.0	79.6	86.8	93.7	96.1	97.5	93.2	89.2	88.5	85.4
1989	90.5	89.9	91.3	93.2	96.1	98.2	96.4	95.4	94.2	91.0	87.9	88.3	92.7
1990	88.2	89.6	92.8	89.7	90.2	92.8	91.7	91.2	90.7	88.3	88.0	85.8	89.9
1991	88.6												
Price spreads retail-to-cons.:													
1988	23.7	24.4	21.6	20.5	16.5	18.0	22.8	21.9	29.9	28.8	26.7	24.1	23.2
1989	27.3	28.6	24.9	29.4	20.2	25.1	27.7	30.9	29.4	33.1	32.0	33.6	28.5
1990	30.5	27.0	29.0	29.4	26.5	30.5	24.9	30.4	27.9	33.7	34.2	30.2	29.5
1991	31.5												
1982-84 = 100													
Retail pr. index wh. chickens:													
1988	107.9	109.5	110.3	111.6	117.4	125.9	137.4	140.1	142.0	136.0	131.7	131.0	125.1
1989	133.7	133.2	135.6	138.0	142.9	144.7	141.7	140.8	139.1	134.9	130.4	130.4	137.1
1990	131.5	133.6	138.4	134.9	134.8	138.2	137.6	136.7	136.3	133.8	132.9	130.6	134.9
1991	131.5												

1/ Liveweight. 2/ 12-city composite weighted average.

pound, compared with almost 10 cents in 1990. Second-quarter net returns will probably average slightly below the 10-cent average of a year earlier.

1991 U.S. Broiler Exports May Fall

Financial constraints in the USSR cloud the outlook for U.S. broiler exports in 1991. Exports to the USSR accounted for 26 percent of total U.S. broiler exports in 1990, all financed without U.S. Government assistance. A reduction in USSR sales would have a negative impact on total exports in 1991. In view of uncertainties regarding USSR's financing capabilities, forecast broiler exports to the USSR have been revised downward, and total 1991 exports are projected at about 1 billion pounds, compared with the record of 1.143 billion pounds in 1990. Sales to other markets are expected to hold about steady overall in 1991.

Unlike last year when no credit guarantees were offered to the USSR, export credit guarantees of \$25 million for poultry meat sales to the USSR were approved in January by the USDA. Most of it has already used to finance sales (and some transport costs) of about 57 million pounds of chicken meat, including about 51.8 million pounds of leg quarters and about 5.5 million pounds of chicken franks. These shipments are expected to be completed during the first quarter. Further sales should be aided by the continuing strong U.S. competitive position in supplying low-cost chicken leg parts, but sales will be influenced by the USSR's capability or willingness to finance them.

Turkeys

Production Increases Slow in 1991

Output during 1991 is expected to grow about 5 percent following the year earlier, 9 percent expansion. Poult placements August through November indicate that first-quarter turkey production will rise 4-5 percent, in contrast to the 22 percent jump in early 1990. Second-quarter 1991 output also is expected to increase 4-5 percent. Weak prices, grower losses since December, and 1990 average returns only marginally above breakeven are expected to restrain expansion.

The annual NASS survey of grower intentions in 20 major producing states on December 1, 1990, also suggests that 1991 production will increase by 5 percent. In general, grower intentions provide a reasonable approximation of actual production with a few notable exceptions, as in 1988. Intentions then were stated as an 8 percent increase, but production of birds only rose about 1 percent. Low wholesale prices and heavy financial losses suffered during the first two quarters of 1988, coupled with a steep rise in feed prices later in the year help explain the weak growth that year.

Stocks became burdensome by late 1990. While production was up 6 percent in the fourth-quarter, per capita consumption was estimated up 2 percent. Stocks were 310 million pounds at the end of the year, 31 percent above a year earlier and at the highest level since the late 1960's. Whole-bird stocks were 61 percent above a year earlier. Large stocks contributed to a sharp drop in prices at the end of the year.

Table 28--Poultry and eggs costs and returns 1/

Year	Production costs		Wholesale		Net returns
	Feed	Total	Total costs 2/	Price 3/	
Market eggs (cents/doz)					
1989:					
I	32.8	51.0	71.5	82.8	11.3
II	32.2	50.4	70.9	76.1	5.2
III	31.0	49.2	69.7	85.2	15.5
IV	28.3	47.0	67.0	96.1	28.6
Year	31.2	49.4	69.9	85.1	15.2
1990:					
I	27.6	45.9	66.3	90.8	24.4
II	29.6	47.8	68.3	76.8	8.6
III	30.0	48.2	68.7	79.3	10.6
IV	27.3	45.5	66.0	88.6	22.6
Year	28.6	46.9	67.3	83.9	16.6
Broilers (cents/lb)					
1989:					
I	19.1	27.1	50.6	59.5	8.9
II	18.6	26.6	49.9	67.3	17.4
III	18.2	26.2	49.4	59.6	10.2
IV	16.8	24.8	47.5	49.8	2.3
Year	18.2	26.2	49.4	59.0	9.7
1990:					
I	15.7	23.7	46.0	56.5	10.5
II	15.8	23.8	46.1	56.6	10.5
III	16.8	24.8	47.4	57.2	9.7
IV	15.8	23.8	46.1	48.8	2.7
Year	16.0	24.0	46.4	54.8	8.4
Turkeys (cents/lb)					
1989:					
I	27.9	41.6	68.3	61.6	-6.7
II	27.5	41.2	67.8	71.3	3.5
III	26.4	40.1	66.4	64.5	-1.9
IV	25.4	39.1	65.2	66.0	0.8
Year	26.7	40.4	66.8	66.0	-0.8
1990:					
I	23.1	36.8	62.3	55.6	-6.7
II	22.5	36.2	61.5	61.6	0.0
III	24.2	37.9	63.6	66.7	3.1
IV	23.6	37.3	62.9	66.7	3.8
Year	23.4	37.1	62.6	63.1	0.4

1/ Estimated costs and prices are weighted by monthly production. 2/ Based on farm cost converted to wholesale market value. 3/ Wholesale prices used are the 12-metro egg price, 12-city weighted average broiler price, and a weighted average of 8-16 lb young hens and 14-22 lb toms in Central, Western and Eastern Regions.

Table 29--U.S. broiler exports to major importers,

Country or area	January -December		
	December	1989	1990
1000 lb.			
U.S.S.R.	16,238	25,800	300,857
Japan	13,656	223,790	206,276
Hong Kong	14,046	161,665	177,782
Mexico	8,595	90,116	84,878
Canada	5,951	66,329	76,740
Singapore	5,458	57,135	48,067
Jamaica	2,311	54,480	27,233
Romania	0	0	26,466
Spain	3,183	12,237	22,264
Saudi Arabia	2,303	5,141	15,086
Netherlands Antilles	1,508	10,571	13,443
French Polynesia	734	11,643	10,536
Other	11,226	94,844	133,759
Grand Total	85,210	813,751	1,143,388

Table 30--U.S. mature chicken exports to major importers

Country or area	January -December		
	December	1989	1990
1000 lb.			
Canada	232	3,223	7,700
Netherlands Antilles	178	4,393	3,848
St. Lucia	123	3,103	2,343
Antigua	45	1,178	1,544
Mexico	133	3,794	1,366
Japan	30	287	818
Bahamas	66	787	673
St. Christ-Nevis	162	359	765
Hong Kong	96	24	575
Aruba	52	1,508	495
Singapore	0	68	410
Other	571	5,269	4,322
Grand Total	1,687	23,993	24,859

Table 31--Federally inspected turkey slaughter, 1988-90

Year	Number	Average weight	Live-weight	Certified RTC
Million Pounds Million pounds				
1989				
I	47.9	21.2	1,012.0	803.5
II	61.8	20.7	1,279.1	1,014.3
III	72.4	20.5	1,483.0	1,176.4
IV	69.6	21.5	1,492.4	1,180.6
Year	251.7	21.0	5,266.5	4,174.8
1990				
I 1/	57.2	21.7	1,240.2	983.4
II 1/	65.6	21.2	1,391.6	1,101.7
III 1/	74.6	20.8	1,548.0	1,222.7
IV 1/	73.7	21.5	1,852.7	1,252.4
Year	271.1	21.3	5,762.5	4,560.2

1/ Preliminary.

Table 32--Turkey hatchery operations 1/

	Total turkeys placed 2/			Eggs in incubators first of month, changes from previous year		
	1988/89	1989/90	1990/91	1988/89	1989/90	1990/91
- - -Thousands - - - - - Percent - - -						
Sept.	15,725	19,900	19,705	7	27	2
Oct.	16,821	20,169	21,454	5	25	0
Nov.	18,413	20,733	21,629	4	14	6
Dec.	20,444	21,511	22,777	6	14	3
Jan.	23,183	24,702	25,902	2	9	3
Feb.	23,842	24,870		6	6	0
Mar.	26,959	27,286		5	1	
Apr.	25,973	28,904		8	6	
May	28,369	29,036		10	5	
June	29,039	29,196		12	7	
July	26,329	29,030		16	2	
Aug.	23,002	25,631		21	11	

1/ Breakdown by breed not shown to avoid disclosing individual operations. 2/ Excludes exported poults.

Prices Low

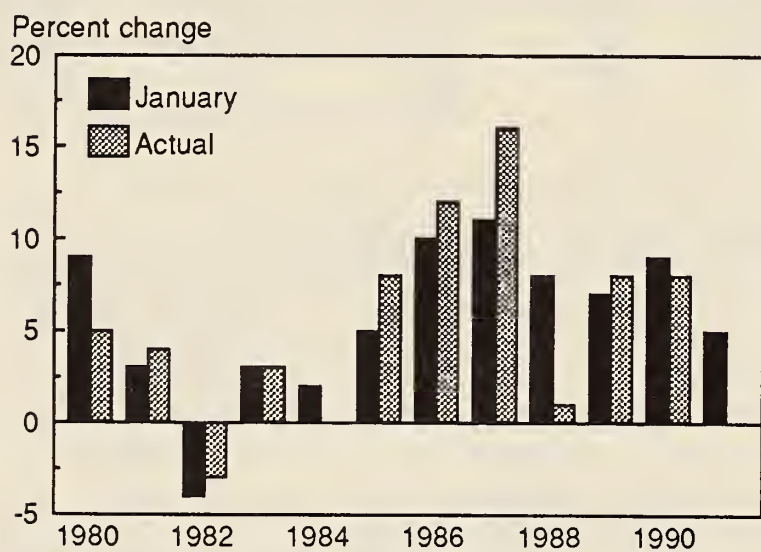
Wholesale turkey prices have fallen sharply since late November. In January, Eastern region hens averaged about 54 cents per pound, 2 cents below a year ago. A 6 percent production increase during the 1990 fourth quarter, on top of already large stocks, combined with slower consumption

Table 33--Turkey prices and price spreads

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Cents/lb.													
Farm price 1/:													
1988	32.3	29.7	28.4	28.4	29.8	32.1	40.4	42.0	45.4	48.4	47.9	38.3	36.9
1989	35.5	38.4	40.3	42.0	43.6	43.8	41.2	40.8	36.4	38.2	40.7	39.3	40.0
1990	35.9	33.7	37.2	37.0	38.2	38.2	38.4	39.9	40.6	42.2	43.0	35.6	38.3
1991	33.9												
New York, hens, 8-16 lb 2/:													
1988	52.8	47.1	47.0	46.9	49.3	57.1	70.8	70.5	76.0	79.6	76.0	61.6	61.1
1989	59.0	62.2	65.7	68.3	72.1	73.0	66.4	62.6	57.9	67.8	72.5	72.7	66.7
1990	55.6	55.2	58.9	59.6	61.3	62.9	63.4	66.6	69.0	76.2	73.7	56.1	63.2
1991	53.5												
4 region average retail price, wholebirds:													
1988	93.1	92.9	91.0	89.4	92.9	92.9	96.0	99.5	100.6	104.0	99.2	97.1	95.7
1989	97.4	96.8	97.6	98.3	100.1	101.3	104.6	104.1	102.0	102.2	93.2	95.0	99.4
1990	98.9	98.3	99.4	97.1	99.8	99.8	100.8	101.4	103.3	105.6	91.1	96.0	99.3
1991	99.4												
Price spreads, retail-to-consumer:													
1988	29.8	35.0	33.4	33.0	35.1	24.6	23.7	21.0	17.3	16.5	14.7	26.7	25.9
1989	29.8	29.9	25.7	23.2	20.7	20.7	30.2	32.3	34.2	28.9	13.4	15.4	25.4
1990	33.7	33.7	32.1	27.7	29.8	29.7	32.1	27.8	26.7	23.7	8.8	29.7	27.9
1991	37.1												
1982-84 = 100													
Consumer price index 3/:													
1988	107.7	107.2	107.2	107.5	108.3	109.3	109.8	112.4	114.2	115.5	113.1	113.3	110.5
1989	114.2	116.3	118.7	121.5	123.2	124.1	126.0	124.6	124.4	123.2	119.2	121.1	121.4
1990	123.9	124.2	124.6	123.4	123.6	122.7	123.9	123.1	124.7	126.9	120.4	123.0	123.7
1991	125.1												

1/ Liveweight. 2/ Wholesale, ready-to-cook. 3/ Other poultry CPI.

Figure 4
Year-Over-Year Turkey Production Changes,
January Intentions vs. Actual Production



Based upon number of birds raised.

growth to contribute to the turkey price break. First-quarter Eastern region hens are expected to average 52-56 cents per pound, compared with 56.5 cents a year ago. The Easter season will provide an early test of the whole bird market for this year. Presently, the weak breast meat market appears to provide the greatest challenge. Wholesale whole hen prices are expected to rise in the second quarter and average 55-61 cents, but remain slightly below the same period of 1990. Prices are expected to be stronger in the second half and, for the year, will likely average 59-65 cents, about the same as a year earlier. Continued low turkey prices relative to red meats, are expected to result in increased turkey consumption, to slightly over 19 pounds per capita during 1991.

Grower Losses

Losses have been experienced by producers since December 1990. First quarter losses are expected to be substantial, perhaps exceeding the 7-cents-per-pound loss of a year earlier, despite feed prices about 5 percent lower than a year ago. Losses are expected to continue into the second quarter. In the second half, however, net returns are expected to be positive. For 1991 overall, net returns are estimated to average near breakeven, not much different from 1990.

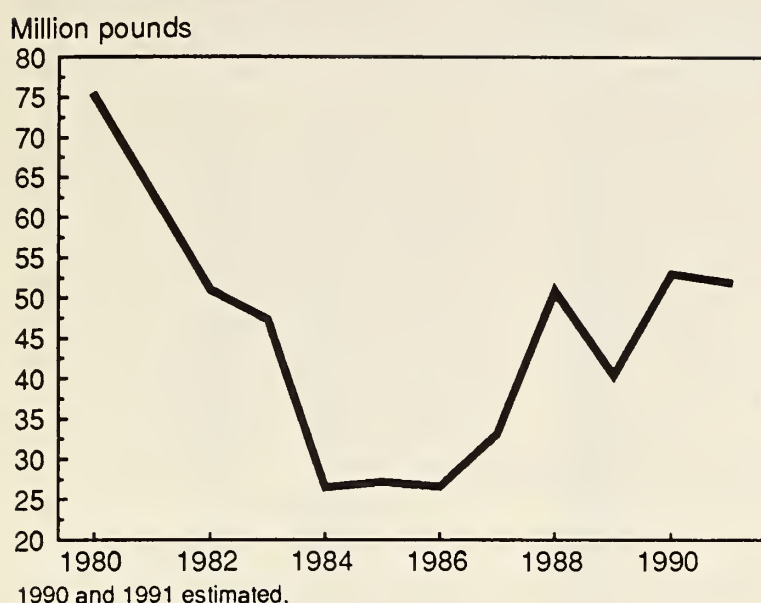
Turkey Exports Strong

Turkey exports are increasing, and while representing only slightly over 1 percent of total production, are a potential growth area. U.S. turkey exports for 1990 were 54 million pounds, up 32 percent from 1989 and at the highest level in 10 years. Turkey parts exports, which are lower valued than

Table 34--U.S. turkey exports to major importers

		January -December	
Country or area	December	1989	1990
1000 lb.			
Mexico	1,714	8,460	15,705
South Korea	922	293	5,973
Hong Kong	246	3,416	5,406
Japan	353	1,956	3,398
Germany	66	755	2,540
USSR	0	1,011	2,327
Canada	93	5,463	1,682
Western Samoa	31	2,577	1,605
South Africa	0	1,310	1,409
Greece	35	610	1,196
Marshall Islands	30	1,115	1,154
Other	1,131	13,615	11,544
Grand Total	4,620	40,580	53,940

Figure 5
U.S. Turkey Exports



whole birds, make up 76 percent of the exports. Their average export unit value was 56 cents per pound compared with 78 cents for whole turkeys.

The largest export increases in 1990 over 1989 were to Mexico, up 85 percent and to the Pacific region, up 70 percent. These markets account for nearly 30 and 40 percent, respectively, of total exports. Mexican turkey production has dropped due to poor returns. Turkey meat from the United States is attractive at a 1990 average export value of 50 cents for parts and 65 cents for whole birds, particularly given rising Mexican beef prices. In the Pacific area the production of turkey also remains negligible. Consumption is low but is beginning to increase. Sales to Europe, mainly to Germany and to the USSR, are also up, and account for about 15 percent of the total.

Export Market Changes

The 1990 composition of turkey exports is similar to that of the 1980 record export market, when 80 percent was lower-priced parts averaging 58 cents compared with 75 cents for whole birds. However, the major export markets were far different in 1980, and exports took 3 percent of production. Africa, mainly Egypt, purchased over 40 percent of total exports. Today, most African countries lack the purchasing power or foreign exchange. They took only 4 percent of 1990 exports. In 1980, Europe took over 30 percent, led by Germany and the U.K. Since then, production has increased rapidly in the EC, particularly in France, and the EC has become a net exporter. Also in 1980, the Pacific only took 5 percent and Mexico, none.

Outlook Favorable for 1991 Exports

Turkey exports are expected to remain high in 1991. Mexico will probably continue to import more as consumption rises further from a very low level. Exports to the Pacific are also expected to keep growing. These economies are rela-

Table 35--Layers on farms and eggs produced, 1988-89 1/

Quar- ters	Number of layer		Eggs per layer		Eggs produced	
	1989	1990 2/	1989	1990 2/	1989	1990 2/
	- Million -		- Number -		Million dozen	
I	273	271	61.5	61.3	1,398.2	1,387.0
II	271	273	62.9	63.0	1,420.6	1,436.0
III	267	267	62.8	63.5	1,396.6	1,412.3
IV	267	267	62.4	63.7	1,387.6	1,417.3
Annual	269	270	249.6	251.6	5,603.0	5,652.6

1/ Marketing year beginning December 1. 2/ Preliminary.

tively buoyant and will probably continue to increase turkey meat imports.

Eggs

More Eggs in 1990

Total egg production in 1990 increased one percent from 1989, to 5.66 billion dozen, with most of the increase in hatching egg production. The increase in total production reversed the 3 percent decline from 1988 to 1989, as table-egg producers increased production in response to record net returns in 1990. Layer numbers averaged 270 million during 1990, up slightly from 1989. The annual average production per hen in 1990 increased from 250 to 252 eggs, reflecting a younger laying flock.

California Continues as Top Egg Producing State

The top ten egg-producing states remained unchanged from 1989. California produced the most eggs, with almost 11 percent of the national production, followed by Indiana with around 8 percent. These shares are unchanged from a year earlier. The only change in the relative ranking of the top 10 egg producing States from 1989 was that Texas and North Carolina switched places. The share of production from the

Figure 6
Egg Production by State, 1990

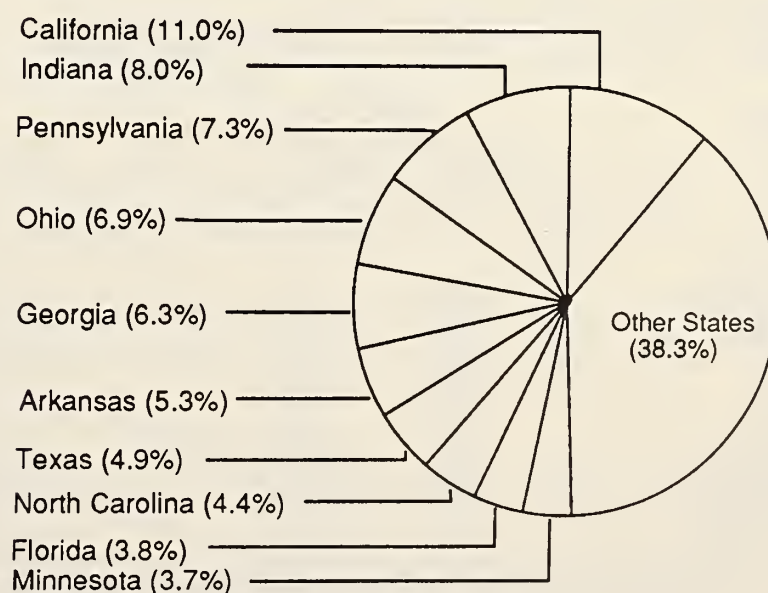


Table 36--Layers and egg production: number produced, average number of layers, and eggs per layer 1/

State	Number of eggs produced		Annual Average number of layers 2/		Eggs per layer 2/	
	1989	1990	1989	1990	1989	1990
	Million eggs		Thousand		Number	
Alabama	2,183	2,206	9,459	9,514	231	232
Alaska	1	1	3	3	187	187
Arizona	79	73	305	302	258	241
Arkansas	3,352	3,620	14,455	15,597	232	232
California	7,317	7,472	30,073	29,931	243	250
Colorado	824	788	3,239	3,142	254	250
Connecticut	934	1,023	3,711	3,776	252	271
Delaware	146	170	640	742	227	228
Florida	2,628	2,586	10,788	10,546	244	245
Georgia	4,211	4,302	17,563	17,562	240	245
Hawaii	227	228	909	974	249	233
Idaho	217	187	864	731	250	255
Illinois	793	793	3,175	3,100	249	255
Indiana	5,529	5,445	21,164	20,719	261	263
Iowa	2,140	2,151	8,505	8,261	252	260
Kansas	387	404	1,549	1,681	249	240
Kentucky	407	407	1,688	1,625	241	250
Louisiana	299	273	1,365	1,245	218	219
Maine	1,140	1,069	4,324	3,926	264	272
Maryland	966	954	3,762	3,680	256	259
Massachusetts	238	235	893	870	266	269
Michigan	1,454	1,404	5,666	5,328	257	264
Minnesota	2,236	2,499	8,740	9,646	256	259
Mississippi	1,289	1,434	5,354	5,979	241	240
Missouri	1,485	1,580	6,181	6,389	240	247
Montana	180	172	702	658	256	261
Nebraska	1,037	1,202	4,090	4,794	253	250
Nevada	2	2	13	12	176	172
New Hampshire	53	43	193	158	274	270
New Jersey	437	442	1,687	1,624	258	272
New Mexico	294	283	1,145	1,171	256	241
New York	1,063	975	3,973	3,658	268	267
North Carolina	3,312	2,986	13,871	12,849	239	232
North Dakota	47	51	206	215	227	236
Ohio	4,367	4,667	16,832	17,676	259	264
Oklahoma	886	869	3,726	3,751	237	231
Oregon	678	652	2,537	2,523	267	258
Pennsylvania	5,232	4,976	19,535	18,576	268	268
Rhode Island	46	42	191	163	240	256
South Carolina	1,342	1,422	5,114	5,441	262	261
South Dakota	373	435	1,461	1,672	255	260
Tennessee	389	277	1,612	1,217	241	227
Texas	3,304	3,317	13,673	13,813	242	240
Utah	460	456	1,849	1,817	248	250
Vermont	37	31	139	102	264	301
Virginia	942	894	3,760	3,570	250	250
Washington	1,299	1,287	4,804	4,856	270	265
West Virginia	121	136	517	571	233	238
Wisconsin	851	910	3,320	3,437	256	264
Wyoming	2	2	13	8	173	194
Total U.S. 3/	67,236	67,832	269,347	269,679	250	252

1/ Annual estimates cover the period December 1, previous year through November 30. 2/ Total egg production divided by average number of layers on hand. 3/ Sum of States may not add to U.S. total due to rounding.

Table 37--Force Moltings and Light-type hen slaughter

Month	Force molt layers 1/						Light-type hens slaughtered under Federal inspection		
	Being molted			Molt completed					
	1989 2/	1990 2/	1991 2/	1989 2/	1990 2/	1991 2/	1988	1989	1990
	Percent						Thousands		
January	4.1	3.0	3.0	23.9	21.5	19.6	13,574	12,219	11,500
February	4.9	5.5		21.5	20.9		14,647	11,819	9,740
March	4.3	4.1		21.7	21.7		15,312	13,645	11,586
April	3.9	1.9		21.5	22.0		15,034	10,528	13,622
May	5.3	4.8		21.4	19.9		14,107	11,868	13,159
June	5.6	4.3		21.7	20.0		13,157	10,316	11,805
July	4.9	3.8		21.7	20.7		8,601	10,194	10,786
August	4.0	4.0		22.7	20.6		10,555	10,871	11,487
September	2.5	3.4		23.0	20.9		9,119	10,777	9,148
October	4.3	3.7		22.9	21.0		10,136	10,249	10,550
November	4.6	3.4		23.5	20.7		11,092	9,158	9,668
December	2.7	2.7		23.9	20.9		13,444	11,294	9,294

1/ Revisions include data from late reports or other corrections developed by the Food Safety and Inspection Service. 2/ Percent of hens and pullets of laying age in 15 selected States in 1989, 20 selected states in 1990 and later.

Table 38--Egg-type chick hatchery operations

Month	Hatch			Eggs in incubators 1/		
	1988	1989	1990	1989	1990	1991
	-----Thousands-----			-----Percent-----		
Jan.	29,274	26,655	32,048	-20	28	1
Feb.	28,433	27,367	32,248	2	23	
Mar.	35,615	32,577	36,407	-15	26	
Apr.	34,749	36,133	37,207	4	6	
May	35,984	38,513	37,706	3	3	
June	33,049	34,708	34,499	-2	-4	
July	24,876	29,814	31,696	16	-1	
Aug.	27,838	32,817	33,039	17	0	
Sept.	30,918	32,850	32,724	4	5	
Oct.	31,007	33,298	32,143	7	-2	
Nov.	29,425	29,662	29,991	-2	0	
Dec.	27,181	29,284	31,050	9	8	

1/ First of the month, percent change from previous year.

top 10 States continues at the same level of the past several years, around 62 percent of total production.

Egg Production To Increase

A slightly larger layer flock will produce about 5.7 billion dozen eggs in 1991, about 1 percent above 1990. Hatching-egg production will likely expand by 3-4 percent, and table-egg production is expected to increase about half a percent. The number of egg-type chicks hatched during 1990 was 4 percent higher than a year earlier, and up 6 percent in December. First-quarter table-egg production is expected to increase 1-2 percent relative to a year earlier, as producers prepare for the seasonal increase in demand associated with Easter, which is in March this year. Only fractional

increases are expected in the following two quarters as producers adjust to expected lower egg prices and returns, especially in the second half.

The table-egg flock size on January 1, 1991, around 230.4 million hens, was fractionally smaller than a year earlier and over 1 percent smaller than on January 1, 1989. The total flock size, 272.4 million hens, was one percent larger than a year earlier, but the hatching-egg flock was 5 percent larger, reflecting the continued growth in broiler production.

Indicators of future table-egg flock size have been running only slightly above last year, suggesting that flock size in the first-half of 1991 will be only slightly larger than a year earlier. Egg-type eggs in incubators on the first of each month for July-December 1990 averaged 1.6 percent above a year earlier, in contrast to around 10 percent a year ago. On January 1 they were up slightly over one percent from 1990, after having been up 28 percent on January 1, 1990, from the year before. On a monthly basis, egg-type chicks hatched during the last half of 1990 averaged 1.7 percent above the year earlier.

Egg Prices To Remain Strong

New York wholesale Grade A large egg prices averaged 82 cents per dozen in 1990, the same as the year earlier. Wholesale prices are expected to continue relatively strong through 1991, but below 1990 levels as additional production is marketed. Average first-quarter wholesale prices in the mid-80's are expected, compared with 88 cents last year. Prices

Table 39--Egg prices and price spreads

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
	Cents/doz.												
Farm price 1/:													
1988	39.1	36.9	40.0	35.8	33.0	36.3	49.5	50.1	56.0	50.6	51.7	53.2	44.4
1989	55.8	53.8	73.3	58.0	54.1	55.5	56.7	64.5	64.2	64.2	73.1	77.6	62.6
1990	78.8	63.1	73.1	64.2	51.2	54.2	46.6	58.2	61.6	66.5	66.2	70.3	62.8
1991	73.6												
New York (cartoned)													
Grade A, large 2/:													
1988	55.9	52.7	56.4	52.1	50.9	56.8	73.6	69.5	75.6	66.0	65.3	70.4	62.1
1989	72.0	71.1	92.2	76.6	73.7	75.2	76.5	84.2	83.8	84.8	93.4	99.6	82.0
1990	92.4	79.6	91.5	82.4	67.9	73.6	70.9	80.3	82.2	86.5	86.5	92.5	82.2
1991	87.5												
4-Region average,													
Grade A, large													
retail price													
1988	76.0	71.8	74.0	71.9	67.8	70.5	80.3	90.9	87.4	89.6	83.9	83.3	79.0
1989	94.1	89.0	103.1	99.7	95.6	93.7	96.1	98.3	103.8	102.3	108.0	113.7	99.8
1990	122.3	104.1	111.1	109.2	94.0	93.0	89.9	95.4	94.6	101.2	101.8	100.1	101.4
1991	110.6												
Price spreads													
retail-to-consumer:													
1988	19.0	18.2	14.9	20.0	16.5	13.0	7.0	20.5	11.2	22.0	16.0	10.1	15.7
1989	18.2	18.6	10.2	23.1	21.2	17.2	18.3	12.1	16.7	16.0	12.3	12.7	16.4
1990	26.7	22.1	16.8	24.3	24.0	17.2	16.9	14.5	12.9	14.7	16.2	7.8	17.8
1991	15.0												
	1982-84 = 100												
Consumer price index:													
1988	90.1	85.5	87.9	85.0	81.8	83.6	95.1	104.2	103.1	105.5	101.2	99.6	93.6
1989	112.0	106.1	122.9	117.6	112.6	110.6	112.8	115.2	124.6	122.9	129.4	134.9	118.5
1990	143.9	124.7	131.6	130.3	115.0	112.2	109.1	119.6	120.6	125.5	128.5	128.7	124.1
1991	139.8												

1/ Market (table) eggs including eggs sold retail by the producer; data not available prior to 1982. 2/ Price to volume buyers.

Table 40--Shell eggs broken and egg products produced under Federal inspection

Period	Shell eggs broken	Egg products produced 1/		
		Liquid	Frozen	Dried
	Thouand dozen	Thousand pounds		
1989:				
January	79,780	28,584	29,255	10,208
February	69,829	26,991	25,612	9,392
March	69,988	31,581	25,136	7,764
April	76,547	29,355	29,153	8,865
May	91,081	32,678	34,600	10,091
June	89,658	31,996	33,306	10,067
July	81,260	28,762	30,521	9,192
August	86,929	34,053	34,325	8,620
September	76,896	33,170	29,094	7,715
October	82,369	37,743	31,738	8,368
November	76,864	36,989	28,864	7,350
December	67,770	31,205	27,091	6,753
Total	948,971	383,107	358,695	104,385
1990:				
January	81,158	37,182	30,282	8,204
February	75,303	33,657	29,998	7,834
March	84,119	39,976	33,951	8,718
April	80,647	35,311	30,582	8,440
May	95,078	41,162	36,587	11,073
June	92,228	37,716	32,672	10,067
July	94,525	37,339	36,391	10,760
August	96,450	40,629	34,151	9,925
September	83,822	37,138	31,546	7,536
October	98,636	45,553	41,798	8,482
November	89,368	38,658	35,287	9,262
December	79,397	34,735	31,665	10,434
Total	1,050,731	459,056	404,910	110,735
Percent change				
from 1989	10.7	19.8	12.9	6.1
1/ Includes ingredients added. 2/ Liquid egg products produced for immediate consumption.				

1/ Includes ingredients added. 2/ Liquid egg products produced for immediate consumption.

for the year are expected to average 74-80 cents per dozen, compared with the record 82 cents of the past two years.

Returns are expected to be positive through all of 1991, with largest returns expected during the first quarter, when sea-

Table 41--U.S. egg exports to major importers 1/

		January -December	
Country or area	December	1989	1990
Thousand dozen			
Japan	4,355	28,654	30,949
Canada	3,329	15,487	27,367
Hong Kong	1,398	7,263	14,136
Mexico	467	14,997	7,223
Jamaica	235	4,120	3,688
United Kingdom	202	899	1,680
Brazil	219	1,282	1,578
Iraq	0	5,003	1,354
Haiti	78	1,577	1,191
Germany	16	1,948	855
Other	768	10,348	10,519
Grand Total	11,068	91,577	100,540

1/ Shell, and shell equivalent of egg products.

sonal factors will help strengthen prices. Returns later in the year will be tempered by price declines associated with production increases. Average retail prices in 1990 were \$1.01 per dozen, compared with \$1 in 1989. Lower average retail prices are expected in 1991.

Downward Trend in Egg Consumption Flattens

While the long-standing downward trend in per capita consumption of eggs continued in 1990, it was not nearly as pronounced as in past years. Per capital egg consumption in 1991 is expected to be around 233 eggs, compared with 234 in 1990, 236 in 1989, and 245 in 1988. Additional consumer information on both the positive and negative aspects of eggs and the increasing use of eggs in other than in shell form are contributing to the flattening in the trend.

Table 42--Red meat supply and utilization, carcass and retail weight 1/

Year	Production		Begin- ning stocks	Im- ports	Total supply	Ex- ports	Ending stocks	Total disap- pearance	Per capita	
	Commer- cial	Farm							Carcass weight	Retail weight
-----Million pounds-----									-----Pounds-----	
Beef:										
1989										
I	5,530	40	422	566	6,558	227	398	5,933	23.9	16.9
II	5,777	17	398	533	6,725	265	322	6,138	24.7	17.4
III	5,893	16	322	524	6,755	267	307	6,181	24.8	17.5
IV	5,774	40	307	552	6,673	264	335	6,074	24.3	17.1
Year	22,974	113	422	2,175	25,684	1,023	335	24,326	97.8	68.9
1990										
I	5,507	40	335	598	6,480	232	408	5,840	23.3	16.4
II	5,733	17	408	573	6,731	237	341	6,153	24.5	17.3
III	5,814	16	341	597	6,768	270	321	6,177	24.6	17.3
IV	5,564	40	321	588	6,513	267	407	5,839	23.2	16.4
Year 2/	22,618	113	335	2,356	25,422	1,006	407	24,009	95.7	67.5
1991										
Year 2/	23,000	113	407	2,270	25,790	1,055	315	24,420	96.5	68.0
Pork:										
1989										
I	3,885	19	437	251	4,592	53	467	4,073	16.4	12.7
II	3,929	8	467	247	4,651	65	442	4,144	16.7	13.0
III	3,790	8	442	198	4,438	65	341	4,032	16.2	12.6
IV	4,155	19	341	200	4,715	79	315	4,321	17.3	13.4
Year	15,759	54	437	896	17,146	262	315	16,569	66.6	51.7
1990										
I	3,902	19	315	212	4,448	69	355	4,024	16.1	12.5
II	3,645	8	355	231	4,239	59	358	3,822	15.2	11.8
III	3,639	8	358	236	4,241	47	290	3,903	15.5	12.0
IV	4,105	19	290	219	4,633	64	298	4,271	17.0	13.2
Year 2/	15,291	54	315	898	16,558	239	298	16,021	63.8	49.5
1991										
Year 2/	15,600	54	298	960	16,912	240	375	16,297	64.4	50.0
Veal:										
1989										
I	91	4	5	0 3/	100	0	7	93	0.4	0.3
II	85	1	7	0	93	0	6	87	0.4	0.3
III	84	2	6	0	92	0	5	87	0.3	0.3
IV	84	4	5	0	93	0	4	89	0.4	0.3
Year	344	11	5	0	360	0	4	356	1.4	1.2
1990										
I	79	4	4	0	87	0	4	83	0.3	0.3
II	74	1	4	0	79	0	5	74	0.3	0.2
III	80	1	5	0	86	0	6	80	0.3	0.3
IV	88	3	6	0	97	0	6	91	0.4	0.3
Year 2/	321	9	4	0	334	0	6	328	1.3	1.1
1991										
Year 2/	292	9	6	0	307	0	4	303	1.2	1.0
Lamb and Mutton:										
1989										
I	88	2	6	16	112	1	7	104	0.4	0.4
II	80	1	7	16	104	0	8	96	0.4	0.3
III	81	1	8	15	105	1	7	97	0.4	0.3
IV	92	2	7	16	117	0	8	109	0.4	0.4
Year	341	6	6	63	416	2	8	406	1.6	1.5
1990										
I	93	2	8	12	115	1	8	106	0.4	0.4
II	90	1	8	12	111	0	10	101	0.4	0.4
III	85	1	10	14	110	1	9	100	0.4	0.4
IV	90	2	9	20	120	1	8	111	0.4	0.4
Year 2/	358	6	8	58	430	3	8	419	1.7	1.5
1991										
Year 2/	360	6	8	55	429	2	7	420	1.7	1.5
Total red meat:										
1989										
I	9,594	65	870	833	11,362	281	879	10,203	41.2	30.2
II	9,871	27	879	796	11,573	330	778	10,465	42.1	31.1
III	9,848	27	778	737	11,390	333	660	10,397	41.7	30.8
IV	10,105	65	660	768	11,598	343	662	10,593	42.4	31.2
Year	39,418	184	870	3,134	43,606	1,287	662	41,657	167.4	123.3
1990										
I	9,581	65	662	822	11,130	302	775	10,053	40.2	29.6
II	9,542	27	775	816	11,160	296	714	10,150	40.5	29.7
III	9,618	26	714	847	11,205	318	626	10,260	40.8	30.0
IV	9,847	64	626	827	11,364	332	719	10,313	41.0	30.3
Year 2/	38,588	182	662	3,312	42,744	1,248	719	40,777	162.5	119.6
1991										
Year 2/	39,252	182	719	3,285	43,438	1,297	701	41,440	163.8	120.5

1/ May not add due to rounding. 2/ Forecast. 3/ Beginning in 1989 veal trade no longer reported separately.

Table 43--Poultry supply and utilization

Year	Slaughter			Begin- ning stocks	Total supply	Ex- ports	Ending stocks	Total disap- pearance	Per capita Retail weight
	Feder- ally Inspected	Other	Total						
	- - - - - Million pounds - - - - -								
									Pounds
Young chicken:									
1989									
I	4,129	21	4,150	36	4,186	176	32	3,978	16.1
II	4,389	24	4,413	32	4,445	208	34	4,202	16.9
III	4,395	25	4,420	34	4,455	190	36	4,229	17.0
IV	4,420	25	4,445	36	4,481	240	38	4,203	16.8
Year	17,334	94	17,428	36	17,464	814	38	16,612	66.8
1990									
I	4,495	26	4,521	38	4,559	277	31	4,250	17.0
II	4,657	28	4,685	31	4,717	310	30	4,377	17.5
III 2/	4,630	28	4,658	30	4,688	255	24	4,408	17.6
IV 2/	4,790	26	4,816	24	4,840	301	25	4,514	17.9
Year 3/	18,572	108	18,680	38	18,718	1,143	25	17,550	69.9
1991									
Year 3/	19,525	106	19,631	25	19,656	1,025	30	18,601	73.5
Other chicken:									
1989									
I	137	12	148	157	305	5	146	153	0.6
II	135	12	147	146	293	4	158	131	0.5
III	132	11	143	158	301	6	155	139	0.6
IV	126	11	136	155	292	8	189	95	0.4
Year	530	45	575	157	731	24	189	518	2.1
1990									
I	133	11	145	189	334	8	219	106	0.4
II	145	12	158	219	377	7	236	134	0.5
III 2/	129	11	140	236	376	5	202	169	0.7
IV 2/	115	10	125	202	327	5	227	95	0.4
Year 3/	522	45	567	189	756	25	227	504	2.0
1991									
Year 3/	525	45	570	227	797	26	225	546	2.2
Total chicken:									
1989									
I	4,266	33	4,299	192	4,491	181	179	4,131	16.7
II	4,524	35	4,559	179	4,738	213	192	4,333	17.4
III	4,527	36	4,563	192	4,756	196	191	4,368	17.6
IV	4,546	35	4,581	191	4,773	247	228	4,298	17.2
Year	17,864	139	18,003	192	18,196	838	228	17,130	68.9
1990									
I	4,628	37	4,665	227	4,893	285	250	4,358	17.4
II	4,802	40	4,843	250	5,094	317	266	4,511	18.0
III 2/	4,759	39	4,798	266	5,064	260	226	4,577	18.3
IV 2/	4,905	36	4,941	226	5,167	306	252	4,609	18.3
Year 3/	19,094	153	19,247	227	19,474	1,168	252	18,054	71.9
1991									
Year 3/	20,050	151	20,201	252	20,453	1,051	255	19,147	75.7
Turkey:									
1989									
I	804	17	820	250	1,070	8	269	793	3.2
II	1,014	25	1,039	269	1,308	10	455	844	3.4
III	1,176	30	1,206	455	1,661	12	569	1,080	4.3
IV	1,181	30	1,211	569	1,780	11	236	1,534	6.1
Year	4,175	101	4,276	250	4,526	41	236	4,250	17.1
1990									
I	983	23	1,007	236	1,243	11	319	912	3.6
II	1,102	27	1,129	319	1,448	10	489	949	3.8
III 2/	1,223	32	1,255	489	1,744	14	620	1,110	4.4
IV 2/	1,252	33	1,285	620	1,906	19	310	1,577	6.3
Year 3/	4,560	115	4,675	236	4,911	54	310	4,547	18.1
1991									
Year 3/	4,770	116	4,886	310	5,196	52	260	4,884	19.3
Total poultry:									
1989									
I	5,070	49	5,119	442	5,561	189	448	4,924	19.9
II	5,538	60	5,599	448	6,047	223	647	5,177	20.8
III	5,704	66	5,770	647	6,416	208	760	5,448	21.9
IV	5,727	66	5,792	760	6,553	258	463	5,832	23.3
Year	22,039	241	22,280	442	22,722	878	463	21,380	85.9
1990									
I	5,611	60	5,672	463	6,135	297	570	5,269	21.0
II	5,904	68	5,972	570	6,542	327	755	5,460	21.8
III 2/	5,982	70	6,052	755	6,807	274	846	5,687	22.6
IV 2/	6,157	69	6,226	846	7,072	325	562	6,185	24.6
Year 3/	23,655	267	23,922	463	24,385	1,223	562	22,600	90.1
1991									
Year 3/	24,820	267	25,087	562	25,649	1,103	515	24,031	95.0

1/ May not add due to rounding. 2/ Estimate. 3/ Forecast.

Table 44--Total red meat and poultry supply and utilization, carcass and retail weight 1/

Year	Total produc- tion	Begin- ning stocks	Im- ports	Total supply	Ex- ports	Ending stocks	Total disap- pearance	Per capita	
								Carcass weight	Retail weight
-----Million pounds-----								-----Pounds-----	
Total red meat and poultry:									
1989									
I	14,778	1,312	833	16,923	470	1,327	15,126	61.1	50.1
II	15,497	1,327	796	17,620	553	1,425	15,642	62.9	51.9
III	15,645	1,425	737	17,807	541	1,420	15,846	63.6	52.7
IV	15,962	1,420	768	18,150	601	1,125	16,424	65.7	54.5
Year	61,882	1,312	3,134	66,328	2,165	1,125	63,038	253.3	209.2
1990									
I	15,318	1,125	822	17,265	599	1,345	15,322	61.2	50.6
II	15,541	1,345	816	17,702	623	1,469	15,610	62.3	51.5
III	15,696	1,469	847	18,012	592	1,472	15,947	63.4	52.6
IV	16,137	1,472	827	18,436	657	1,281	16,498	65.6	54.9
Year 2/	62,692	1,125	3,312	67,129	2,471	1,281	63,377	252.6	209.7
1991									
Year 2/	64,521	1,281	3,285	69,087	2,400	1,216	65,471	258.8	215.5

1/ May not add due to rounding. 2/ Forecast.

Table 45--Egg supply and utilization (population includes military) 1/

Year	Pro- duction	Beginning stocks	Breaking egg use	Imports 2/	Total supply	Exports	Hatching egg use 3/	Ending stocks	Consumption	
									Total	Per capita
-----Million dozen-----										
Total eggs										
1989										
I	1,393.5	15.2	---	1.9	1,410.5	23.7	155.3	11.7	1,219.8	59.1
II	1,396.9	11.7	---	8.2	1,416.9	21.2	165.4	12.2	1,218.0	58.8
III	1,392.6	12.2	---	10.4	1,415.2	23.2	161.4	11.6	1,219.0	58.7
IV	1,414.8	11.6	---	4.6	1,431.1	23.5	160.7	10.7	1,236.2	59.4
Year	5,597.8	15.2	---	25.2	5,638.2	91.6	642.9	10.7	4,893.0	236.0
1990										
I	1,391.3	10.7	---	1.9	1,403.9	18.4	167.3	13.4	1,204.8	57.7
II	1,410.8	13.4	---	4.1	1,428.3	18.8	173.1	14.4	1,222.1	58.5
III	1,413.0	14.4	---	2.7	1,430.1	25.9	168.9	13.1	1,222.3	58.4
IV	1,444.1	13.1	---	0.4	1,457.6	37.5	166.6	11.2	1,242.9	59.2
Year 4/	5,659.2	10.7	---	9.1	5,678.9	100.5	675.8	11.2	4,891.4	233.9
1991										
Year 4/	5,715.0	11.2	---	7.0	5,733.2	104.0	720.0	12.0	4,897.2	232.3
Shell eggs										
1989										
I	1,393.5	0.3	219.6	1.4	1,175.5	9.1	155.3	0.5	1,010.6	48.9
II	1,396.9	0.5	257.3	7.6	1,147.7	9.7	165.4	0.8	971.7	46.9
III	1,392.6	0.8	245.1	9.9	1,158.2	16.2	161.4	0.7	979.9	47.2
IV	1,414.8	0.7	227.0	4.1	1,192.6	17.4	160.7	0.4	1,014.1	48.7
Year	5,597.8	0.3	949.0	22.9	4,674.0	52.4	642.9	0.4	3,978.3	191.1
1990										
I	1,391.3	0.4	240.6	1.4	1,152.5	12.1	167.3	0.7	972.4	46.6
II	1,410.8	0.7	268.0	3.8	1,147.3	12.1	173.1	0.7	961.4	46.0
III	1,413.0	0.7	274.8	2.5	1,141.4	13.7	168.9	0.5	958.2	45.8
IV	1,444.1	0.5	267.4	0.3	1,177.5	15.0	166.6	0.6	995.4	47.4
Year 4/	5,659.2	0.4	1,050.7	8.0	4,618.7	53.0	675.8	0.6	3,889.4	185.4

1/ Totals may not add due to rounding. 2/ Shell eggs and approximate shell-egg equivalent of egg products.
 3/ Hatching egg use for 1986-present calculated by a new method. 4/ Forecast. --- Not applicable for total egg supply and utilization.

Table 46--Average Bureau of Labor Statistics (BLS) retail price per pound of specified meat cuts

Year and item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dollars												
Choice Beef:												
Ground chuck												
1989	1.81	1.80	1.85	1.82	1.82	1.80	1.81	1.82	1.82	1.84	1.87	1.88
1990	1.91	1.95	1.94	1.97	1.97	1.97	1.95	1.97	1.99	1.97	2.00	2.02
1991	2.00											
Ground beef												
1989	1.40	1.37	1.43	1.42	1.44	1.44	1.44	1.45	1.46	1.45	1.49	1.50
1990	1.56	1.57	1.57	1.59	1.58	1.59	1.58	1.58	1.59	1.58	1.62	1.63
1991	1.65											
Chuck roast, bone in												
1989	1.81	1.91	1.87	1.89	1.90	1.86	1.86	1.78	1.88	1.89	1.92	2.00
1990	2.03	2.12	2.05	2.10	2.12	2.07	2.07	2.04	2.07	2.09	2.15	2.15
1991	2.16											
Chuck roast, boneless												
1989	2.30	2.27	2.35	2.30	2.28	2.31	2.31	2.31	2.27	2.33	2.34	2.43
1990	2.49	2.50	2.44	2.47	2.47	2.43	2.42	2.49	2.47	2.51	2.57	2.60
1991	2.62											
Round roast, boneless												
1989	2.75	2.75	2.76	2.77	2.78	2.73	2.73	2.71	2.78	2.78	2.77	2.78
1990	2.91	2.89	2.93	2.92	2.95	2.92	2.93	2.92	2.89	2.97	2.95	3.02
1991	3.08											
Rib roast, bone in												
1989	4.11	4.04	4.06	4.16	4.24	4.06	4.34	4.29	4.19	4.17	4.19	4.21
1990	4.29	4.29	4.37	4.33	4.44	4.54	4.62	4.57	4.65	4.66	4.56	4.54
1991	4.71											
Round steak, boneless												
1989	3.07	3.09	3.12	3.14	3.10	3.06	3.11	3.12	3.10	3.12	3.18	3.17
1990	3.30	3.31	3.27	3.29	3.32	3.35	3.29	3.32	3.28	3.33	3.39	3.42
1991	3.39											
Sirloin steak, bone in												
1989	3.39	3.40	3.61	3.57	3.70	3.67	3.70	3.66	3.62	3.55	3.57	3.46
1990	3.58	3.55	3.52	3.80	3.61	3.79	3.73	3.73	3.68	3.72	3.74	3.65
1991	3.69											
Sirloin steak, boneless												
1989	3.85	3.95	3.93	3.89	4.02	4.04	4.15	3.99	3.95	3.76	3.81	3.79
1990	3.82	3.85	3.93	4.07	4.19	4.19	4.23	4.22	4.30	4.25	4.24	4.24
1991	4.29											
T-Bone steak, bone in												
1989	4.95	4.91	5.05	5.04	5.14	5.16	5.22	5.10	5.15	5.08	4.99	5.04
1990	5.11	4.56	4.71	4.78	4.96	5.01	4.99	4.91	5.01	4.96	5.41	5.45
1991	5.38											
Pork:												
Bacon, sliced												
1989	1.80	1.80	1.79	1.75	1.68	1.69	1.71	1.72	1.72	1.77	1.82	1.96
1990	1.97	2.01	1.99	1.98	2.04	2.15	2.21	2.24	2.18	2.21	2.24	2.28
1991	2.26											
Chops, center cut												
1989	2.78	2.75	2.80	2.80	2.76	2.82	2.91	2.92	2.95	2.89	2.97	2.85
1990	3.02	2.96	3.01	3.16	3.20	3.44	3.47	3.51	3.36	3.37	3.37	3.32
1991	3.25											
Ham, rump or shank half 1/												
1989	1.58	1.57	1.57	1.58	1.56	1.58	1.61	1.63	1.62	1.63	1.66	1.66
1990	1.70	1.70	1.82	1.72	1.78	1.89	1.91	1.94	1.92	1.93	1.94	1.94
1991	1.73											
Sirloin roast, bone in 1/												
1989	1.89	1.88	1.88	1.88	1.86	1.89	1.92	1.94	1.93	1.94	1.97	1.98
1990	2.02	2.02	2.04	2.06	2.12	2.25	2.28	2.31	2.29	2.31	2.32	2.31
1991	2.31											
Shoulder picnic, bone in												
1989	1.12	1.06	1.06	1.08	1.07	1.08	1.09	1.10	1.10	1.10	1.12	1.17
1990	1.14	1.18	1.18	1.21	1.24	1.28	1.30	1.32	1.35	1.39	1.39	1.41
1991	1.40											
Sausage, fresh, loose												
1989	1.92	1.94	1.92	1.93	1.94	1.93	1.99	2.04	2.02	2.10	2.11	2.12
1990	2.12	2.20	2.16	2.21	2.29	2.41	2.49	2.50	2.49	2.52	2.39	2.42
1991	2.43											
Miscellaneous cuts:												
Ham, canned, 3 or 5 lb												
1989	2.75	2.71	2.63	2.70	2.64	2.68	2.66	2.65	2.70	2.68	2.61	2.62
1990	2.72	2.77	2.75	2.68	2.77	2.85	2.84	NA	NA	NA	NA	NA
1991	3.15											
Frankfurters, all meat												
1989	2.08	2.07	2.07	2.03	2.05	2.02	2.01	2.09	2.09	2.04	2.10	2.11
1990	2.16	2.22	2.23	2.19	2.18	2.31	2.31	2.28	2.37	2.37	2.44	2.40
1991	2.41											
Bologna												
1989	2.22	2.24	2.23	2.24	2.23	2.24	2.24	2.27	2.34	2.38	2.37	2.40
1990	2.42	2.44	2.45	2.47	2.47	2.54	2.52	2.56	2.50	2.50	2.61	2.60
1991	2.63											

1/ ERS estimate from BLS index and historical data. NA= Not available

Table 47--Selected price statistics for meat animals and meat, 1989-1990

Item	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Dollars per cwt												
Slaughter Steers:												
Omaha												
Choice, 1000-1100 lb	76.61	78.15	79.36	77.57	75.63	74.46	76.22	75.75	77.50	79.93	80.88	78.95
Select, 1000-1100 lb	73.92	75.46	77.00	75.91	73.88	72.65	73.97	73.57	75.50	77.61	79.31	76.55
California												
Choice, 1000-1100 lb	78.67	78.38	78.13	75.90	74.34	74.75	76.70	76.75	77.58	77.81	77.75	77.88
Colorado												
Choice, 1100-1300 lb	78.30	79.30	79.78	78.13	76.61	75.35	77.63	78.07	79.65	80.89	80.62	79.17
Texas												
Choice, 1000-1100 lb	78.62	79.31	80.00	78.14	76.73	75.07	77.61	78.05	79.82	81.12	81.26	79.54
Slaughter heifers:												
Omaha												
Choice, 1000-1200 lb	77.48	78.42	79.51	77.82	76.08	74.77	76.46	76.41	78.38	80.70	81.19	78.97
Select, 900-1000 lb	73.15	74.19	75.63	74.56	72.41	71.04	72.28	72.17	74.27	76.33	77.89	76.22
Cows:												
Omaha												
Commercial	52.13	54.04	53.77	54.96	55.63	54.27	56.03	54.40	51.73	50.73	50.50	NA
Breaking Utility	52.79	54.67	54.48	55.41	56.04	54.56	56.07	54.33	51.10	50.46	50.00	NA
Boning Utility	54.86	55.96	55.84	56.37	58.42	56.88	56.90	54.46	53.23	50.75	51.00	NA
Canner	46.83	49.25	49.21	50.12	52.00	50.58	51.75	48.71	45.80	43.42	44.50	NA
Cutter	51.59	54.92	54.67	55.38	56.31	54.77	55.77	53.63	51.08	49.04	50.00	NA
Vealers: 1/												
Choice, New York	104.38	101.50	102.88	102.00	99.88	96.00	94.60	95.50	95.00	90.63	89.63	91.40
Feeder steers:												
Kansas City												
Medium No. 1,												
400-500 lb	101.00	102.88	104.88	105.30	108.50	107.50	105.50	NA	NA	103.75	105.00	104.70
600-700 lb	84.88	87.50	90.81	91.90	94.13	93.50	92.30	91.50	NA	92.75	92.67	90.70
All weights												
and grades	82.86	83.15	85.42	85.14	87.77	86.82	87.30	87.58	NA	89.51	89.34	87.89
Okla. City												
Medium No. 1												
400-500 lb	105.13	105.89	111.35	109.74	106.14	106.03	110.42	106.41	104.25	108.96	112.33	112.25
600-700 lb	85.35	87.85	91.13	93.71	94.74	93.35	96.50	94.41	92.14	93.56	95.67	94.21
700-800 lb	82.14	82.18	84.49	86.80	90.39	90.02	91.54	90.91	90.30	92.42	93.19	90.13
Amarillo												
Medium No. 1,												
600-700 lb	84.13	86.13	85.88	87.30	87.63	89.44	94.10	90.88	90.00	89.88	92.00	92.38
Georgia Auctions												
Medium No. 1,												
600-700 lb	82.00	83.75	86.75	86.80	87.13	86.67	87.60	85.00	82.20	82.00	86.67	86.80
Medium No. 2,												
400-500 lb	89.25	92.13	93.13	90.90	89.88	88.17	91.40	87.63	86.90	89.38	92.17	93.10
Feeder heifers:												
Medium No. 1,												
Kansas City												
400-500 lb	89.50	92.13	92.88	95.20	94.38	91.50	91.00	NA	NA	90.25	91.00	93.60
600-700 lb	80.75	80.38	84.69	85.50	84.75	84.75	85.20	85.50	NA	86.75	87.50	85.90
Okla. City												
400-500 lb	90.39	92.14	95.47	96.03	94.30	91.53	96.30	92.97	91.23	97.60	98.92	97.80
600-700 lb	79.81	80.83	83.10	85.50	87.14	87.61	89.74	87.49	85.25	86.58	88.88	87.63
Slaughter hogs:												
Barrows and gilts												
Omaha No. 1 & 2,												
230-240 lb	50.33	53.03	54.80	63.54	61.71	63.18	57.59	55.91	57.60	50.88	49.87	52.33
All weights	47.22	51.76	54.32	62.21	60.71	62.31	56.94	55.34	57.71	50.01	48.56	51.52
Sioux City	49.48	52.56	54.63	62.80	61.34	62.54	56.37	55.64	58.02	50.17	48.96	51.32
7 markets 2/	48.51	51.91	54.11	62.18	60.75	61.87	56.05	55.10	57.15	49.70	48.15	51.00
Sows:												
7 markets 2/	43.91	47.61	51.49	54.27	52.45	49.20	50.53	47.04	50.38	45.64	41.73	43.44
Feeder pigs:												
No. 1 & 2, So. Mo.												
40-50 lb (per hd.)	54.41	63.19	64.97	56.80	47.32	46.35	45.85	45.91	52.33	46.22	49.63	48.50
Slaughter lambs:												
Choice, San Angelo	60.38	63.69	63.13	62.25	53.56	53.25	51.20	51.75	52.50	50.42	48.08	47.63
Choice, So. St. Paul	61.68	63.43	57.43	61.70	53.75	51.71	49.82	49.00	50.20	45.89	46.06	46.60
Ewes, Good,												
San Angelo	38.47	38.81	36.50	33.25	32.38	34.83	36.60	32.88	32.00	33.83	34.67	31.94
So. St. Paul	22.00	22.65	17.85	13.88	13.93	15.47	19.74	14.91	16.69	17.11	19.43	22.67
Feeder lambs:												
Choice, San Angelo	74.88	75.63	71.31	64.30	56.50	53.75	58.30	55.75	55.90	57.83	59.17	50.63
Choice, So. St. Paul	68.65	70.00	62.38	64.88	56.45	51.16	48.36	49.50	50.30	49.50	49.70	50.32
Farm prices:												
Beef cattle	74.60	74.20	74.60	74.40	74.40	73.60	76.10	75.00	75.50	75.30	77.10	76.00
Calves	96.00	99.10	100.40	101.00	98.10	96.50	99.20	95.00	92.80	93.90	96.80	96.30
Hogs	48.20	51.30	53.80	61.20	60.10	60.80	55.90	54.30	56.80	50.20	47.30	47.80
Sheep	30.90	30.00	23.50	19.70	19.60	24.70	24.30	18.90	20.00	20.40	22.40	27.40
Lambs	59.80	66.00	62.90	59.80	55.40	54.40	54.00	52.80	52.00	50.10	48.60	48.60

Table 47--Selected price statistics for meat animals and meat, 1989-1990--Continued

Item	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Dollars per cwt												
Meat prices:												
Wholesale												
Central U.S. markets												
Cow beef, Canner and Cutter	100.95	102.04	100.61	101.29	101.51	101.62	105.22	101.93	96.01	91.11	97.32	95.67
Boxed beef cut-out												
Choice, 1-3												
550-700 lb	120.97	122.10	123.62	124.56	121.53	118.54	121.52	121.18	124.96	128.32	129.48	125.04
700-850 lb	120.28	121.61	123.64	125.98	122.56	118.85	121.26	120.33	124.41	128.41	128.73	123.92
Select, 1-3												
550-700 lb	117.22	118.79	119.31	115.75	114.20	113.43	115.13	115.17	116.84	118.83	118.65	120.03
700+ lb	117.03	118.62	119.25	116.54	114.94	113.58	115.23	114.66	115.78	118.38	118.02	119.81
Cutter Cows	107.66	110.53	107.38	107.66	107.39	108.10	112.13	109.49	102.39	99.67	104.74	104.08
Pork loins												
14-18 lb 3/	107.75	117.26	120.68	136.06	125.62	144.14	119.56	121.64	113.71	98.94	103.50	107.53
Pork bellies												
12-14 lb	42.53	42.60	52.60	61.48	65.15	53.18	51.08	51.31	59.83	60.57	56.58	64.11
Hams, skinned												
14-17 lb	76.50	79.00	77.33	81.60	NA	91.00	ng	101.75	107.24	108.00	86.13	73.00
17-20 lb	75.38	77.68	74.11	81.67	85.60	89.20	91.29	95.82	104.32	97.96	77.46	71.97
Pork cut-out												
value 4/	65.30	69.54	72.14	81.49	80.61	82.31	76.81	76.16	77.98	72.88	69.32	68.71
East Coast Lamb												
Choice and Prime												
35-45 lb	142.81	145.25	135.56	128.75	119.94	124.88	118.25	117.88	121.25	120.25	120.25	115.72
55-65 lb	127.81	135.25	123.38	125.25	120.25	124.88	120.25	120.00	120.25	114.75	113.75	109.05
Cents per lb												
Retail												
Beef												
Choice	271.0	272.5	277.9	283.6	282.1	279.9	280.6	280.6	282.7	291.6	295.3	294.9
All fresh	249.1	249.1	252.9	251.5	254.0	255.8	254.7	256.4	259.4	263.4	265.8	261.3
Pork	196.5	197.0	200.9	206.2	218.1	222.2	224.9	220.8	223.2	222.9	223.2	216.1
Indexes, 1982-84=100												
Price indexes: (BLS)												
Retail meats	123.5	124.0	125.2	126.6	129.6	130.3	130.5	131.0	131.7	133.1	133.6	133.5
Beef and veal	126.2	126.6	128.0	128.5	129.0	129.2	128.5	129.5	130.1	131.9	133.0	132.9
Pork	119.7	121.0	121.6	125.5	132.9	134.8	136.5	135.4	136.4	137.1	136.8	136.5
Other meats	122.9	122.7	124.4	124.2	127.4	127.9	128.0	129.8	130.0	131.4	131.6	131.6
Poultry	130.5	134.8	132.1	132.3	134.0	135.3	133.6	134.6	133.7	130.5	129.7	131.3
Livestock-feed ratios												
Omaha: 5/												
Steer-corn	34.0	32.6	31.1	29.3	27.9	28.5	30.9	34.5	36.5	37.3	36.5	35.3
Hog-corn	22.0	21.9	21.2	23.6	22.4	23.9	23.1	25.1	27.0	23.2	22.0	23.0

1/ Beginning Jan. 1989 New York auctions (150-250 lb). 2/ St. Louis N.S.Y., Kansas City, Omaha, Sioux City, So. St. Joseph, So. St. Paul, and Indianapolis. 3/ Prior to 1984, 8-14 lb; 1984 and 1985, 14-17 lb; 1986, 14-18 lb. 4/ U.S. #2, 175 lb carcass. 5/ Bushels of No. 2 yellow corn equivalent in value to 100 pounds live weight.

Table 48--New selected cattle price series with comparisons

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.	Previous series	Difference
Dollars/cwt.															
Feeder steers, Medium Frame No. 1, 600-700 lb., Oklahoma City														Kansas City	
1977	36.09	39.19	39.68	42.11	41.30	40.31	40.60	40.84	41.80	40.00	40.72	41.45	40.34	40.18	0.16
1978	43.90	47.72	53.35	55.97	59.34	58.71	61.74	62.29	64.34	63.98	64.80	72.40	59.04	58.78	0.26
1979	75.50	82.58	89.72	91.20	86.82	80.10	79.55	79.03	84.06	79.11	80.78	81.41	82.49	83.08	-0.59
1980	80.88	82.78	77.96	67.33	68.18	69.96	72.85	75.12	75.43	75.22	73.36	73.88	74.41	75.23	-0.82
1981	71.96	70.50	68.15	68.24	63.78	63.88	62.10	64.78	65.59	63.50	64.74	59.81	65.58	66.24	-0.66
1982	59.95	63.27	65.11	65.65	66.19	64.83	65.54	67.98	65.70	63.35	62.79	63.46	64.48	64.81	-0.33
1983	66.59	68.34	71.16	68.44	65.43	63.82	61.76	60.01	57.99	58.59	62.57	65.55	64.19	63.71	0.48
1984	67.10	68.32	67.70	65.88	63.27	62.48	63.91	64.57	64.02	64.11	66.84	70.48	65.72	65.29	0.43
1985	71.07	71.85	67.91	68.10	66.14	63.54	61.52	62.35	58.87	62.08	63.87	62.98	65.02	64.56	0.46
1986	63.39	63.32	61.45	59.02	57.24	56.72	62.38	65.41	65.77	64.44	66.19	64.36	62.47	62.79	-0.32
1987	67.70	72.15	71.39	73.35	73.40	75.50	79.28	81.34	83.45	79.68	79.99	80.97	76.52	75.36	1.16
1988	83.73	85.99	85.63	86.29	85.67	78.59	80.69	86.21	83.97	85.32	86.41	88.10	84.72	83.68	1.04
1989	87.78	87.86	85.98	84.11	81.38	87.10	89.54	88.48	87.01	85.62	86.34	88.67	86.66	86.13	0.53
1990	87.34	85.35	87.85	91.13	93.71	94.74	93.35	96.50	94.41	92.14	93.56	95.67	92.15	90.86	1.29
1986-90	77.99	78.93	78.46	78.78	78.28	78.53	81.05	83.59	82.92	81.44	82.50	83.55	80.50	79.76	0.74
Seasonal	0.97	0.98	0.97	0.98	0.97	0.98	1.01	1.04	1.03	1.01	1.02	1.04	1.00		
1977-90	68.78	70.66	70.93	70.49	69.42	68.59	69.63	71.07	70.89	69.80	70.93	72.09	70.27	70.05	0.22
Seasonal	0.98	1.01	1.01	1.00	0.99	0.98	0.99	1.01	1.01	0.99	1.01	1.03	1.00		
Direct Slaughter Steers, all weights and grades, Nebraska														Ch. Steers 1000-1100 lb. Omaha	
1977	38.10	37.98	37.72	40.70	41.58	39.93	41.38	40.63	40.98	42.68	42.08	43.83	40.63	40.38	0.25
1978	44.08	46.08	49.59	53.29	58.23	55.38	54.82	52.73	55.33	55.62	54.38	56.62	53.01	52.34	0.67
1979	61.77	66.06	72.46	76.38	74.88	69.00	67.52	63.55	68.53	66.13	67.84	68.55	68.56	67.75	0.81
1980	66.10	67.43	66.66	63.91	65.54	67.12	71.96	73.70	70.35	68.26	65.56	65.14	67.64	66.96	0.68
1981	63.00	61.18	60.84	65.84	67.36	69.44	68.51	66.77	66.55	62.91	61.00	59.64	64.42	63.84	0.58
1982	61.24	65.08	67.91	70.41	74.06	71.18	66.62	66.70	61.83	59.82	59.72	59.52	65.34	64.22	1.12
1983	60.34	62.11	65.16	69.51	68.64	66.05	62.96	62.26	60.01	60.40	60.48	65.69	63.63	62.52	1.11
1984	68.96	67.98	69.87	69.54	66.64	65.80	67.74	65.85	63.20	62.82	66.44	66.69	66.79	65.34	1.45
1985	65.52	63.40	60.36	59.64	59.21	57.43	53.83	53.24	53.16	60.81	65.68	64.66	59.75	58.37	1.38
1986	60.96	57.34	56.61	55.16	57.35	56.32	60.00	60.78	60.89	61.32	63.47	60.80	59.25	57.74	1.51
1987	60.25	62.89	64.01	69.22	72.20	70.53	66.66	65.69	66.37	66.32	66.31	64.92	66.28	64.60	1.68
1988	66.67	69.87	72.96	74.26	76.68	70.76	67.21	69.91	70.07	71.33	72.01	72.52	71.19	69.54	1.65
1989	73.39	74.27	78.10	77.50	75.64	72.20	71.47	72.47	68.93	71.11	74.28	77.00	73.86	72.52	1.34
1990	78.14	78.22	79.03	79.89	78.17	76.68	75.95	77.18	77.60	79.33	81.06	81.42	78.56	77.40	1.16
1986-90	67.88	68.52	70.14	71.21	72.01	69.30	68.26	69.21	68.77	69.88	71.43	71.33	69.83	68.36	1.47
Seasonal	0.97	0.98	1.00	1.02	1.03	0.99	0.98	0.99	0.98	1.00	1.02	1.02	1.00		
1977-90	62.04	62.85	64.38	66.09	66.87	64.84	64.05	63.68	63.13	63.49	64.31	64.79	64.21	63.11	1.10
Seasonal	0.97	0.98	1.00	1.03	1.04	1.01	1.00	0.99	0.98	0.99	1.00	1.01	1.00		
Bonning Utility Cows, Sioux Falls														Breaking Utility, Omaha	
1977	24.68	25.96	27.53	29.54	29.01	27.85	27.42	26.54	27.24	25.76	24.46	26.22	26.85	25.32	1.53
1978	29.22	32.79	34.62	38.65	40.66	39.30	39.95	39.95	42.42	42.54	42.07	45.05	38.94	36.79	2.15
1979	50.67	55.41	56.68	59.86	56.41	53.81	50.39	49.19	50.11	48.81	47.10	46.73	52.10	50.10	2.00
1980	48.76	52.52	50.19	47.87	44.92	46.19	45.32	47.80	49.76	48.16	46.02	44.26	47.65	45.73	1.92
1981	42.08	44.72	44.21	45.52	43.52	42.95	44.33	46.00	44.40	41.15	38.73	36.27	42.82	41.93	0.89
1982	37.09	38.44	41.68	41.35	43.92	43.04	43.84	42.30	40.60	39.80	36.29	35.70	40.34	39.96	0.38
1983	36.89	40.15	42.99	42.10	42.88	41.66	40.79	40.05	39.42	37.69	33.98	34.26	39.40	39.35	0.05
1984	33.69	39.75	43.76	43.92	41.14	40.41	40.35	38.64	35.21	38.32	35.16	34.50	38.74	39.81	-1.07
1985	36.95	40.40	39.81	40.15	39.77	37.44	36.59	36.74	36.22	34.66	33.00	32.05	36.98	38.32	-1.34
1986	34.07	36.52	37.84	34.13	37.41	38.19	38.50	38.19	39.24	37.18	37.19	35.42	36.99	37.22	-0.23
1987	39.28	42.49	45.50	46.60	43.86	43.64	44.55	46.25	44.62	44.50	43.46	45.13	44.16	44.83	-0.67
1988	47.24	47.99	49.98	51.50	49.56	42.29	44.19	46.93	47.50	47.16	45.50	46.72	47.21	46.55	0.66
1989	47.48	50.31	50.42	48.38	46.73	46.19	49.72	51.05	51.54	50.63	46.48	48.88	48.98	47.86	1.12
1990	49.89	53.81	56.66	55.94	53.94	55.31	55.75	56.86	55.41	50.58	48.75	50.35	53.60	53.31	0.29
1986-90	43.59	46.22	48.08	47.31	46.30	45.12	46.54	47.86	47.66	46.01	44.28	45.30	46.19	45.95	0.23
Seasonal	0.94	1.00	1.04	1.02	1.00	0.98	1.01	1.04	1.03	1.00	0.96	0.98	1.00		
1977-90	39.86	42.95	44.42	44.68	43.84	42.73	42.98	43.32	43.12	41.92	39.87	40.11	42.48	41.93	0.55
Seasonal	0.94	1.01	1.05	1.05	1.03	1.01	1.01	1.02	1.02	0.99	0.94	0.94	1.00		

Table 49--Selected marketings, slaughter, stocks, and trade for meat animals and meat, 1989-1990

Item	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1,000 head													
Federally inspected:													
Slaughter													
Cattle	2,600	2,775	2,437	2,696	2,552	2,920	2,873	2,789	2,918	2,553	2,877	2,622	2,380
Steers	1,245	1,324	1,208	1,363	1,314	1,511	1,486	1,418	1,475	1,245	1,360	1,264	1,191
Heifers	766	807	749	814	751	874	894	889	906	822	893	764	674
Cows	542	590	434	469	437	478	438	429	475	433	563	543	471
Bulls and stags	47	54	45	50	49	57	54	52	62	53	59	51	44
Calves	167	175	145	165	128	137	132	139	147	132	158	149	137
Sheep and lambs	457	479	431	481	466	465	426	430	463	422	491	465	449
Hogs	7,012	7,407	6,643	7,279	6,785	6,799	6,152	5,983	7,110	6,722	7,546	7,336	7,139
Percentage sows	4.7	4.5	3.7	3.9	4.1	4.6	5.3	5.5	5.2	4.6	4.4	4.2	4.0
Pounds													
Average live wt per head													
Cattle	1,156	1,150	1,150	1,136	1,117	1,113	1,120	1,128	1,146	1,149	1,154	1,149	1,150
Calves	237	246	261	264	270	285	285	278	287	290	298	289	303
Sheep and lambs	129	129	131	130	126	128	126	123	122	123	125	125	127
Hogs	250	249	248	249	250	251	252	249	249	247	250	253	252
Average dressed wt													
Beef	688	684	687	682	672	676	678	685	696	698	696	688	691
Veal	144	149	158	162	168	181	185	180	185	187	191	185	194
Lamb and mutton	66	66	67	66	65	65	64	63	62	62	63	64	64
Pork	179	180	179	179	180	181	182	180	180	179	180	183	184
Million pounds													
Production													
Beef	1,783	1,889	1,668	1,831	1,709	1,967	1,943	1,903	2,024	1,777	1,995	1,798	1,640
Veal	24	26	23	26	21	24	24	24	27	24	30	27	26
Lamb and mutton	30	31	28	32	30	30	27	27	29	26	31	29	29
Pork	1,252	1,327	1,186	1,300	1,219	1,228	1,116	1,075	1,278	1,199	1,357	1,340	1,306
1,000 head													
Commercial: 1/													
Slaughter													
Cattle 1/	2,680	2,851	2,502	2,764	2,618	2,989	2,934	2,852	2,983	2,615	2,960	2,701	2,451
Steers	1,283	1,361	1,241	1,397	1,349	1,547	1,518	1,451	1,508	1,275	1,401	1,302	1,227
Heifers	790	829	769	835	771	895	913	909	926	842	919	787	694
Cows	559	606	446	481	448	489	448	439	486	444	579	559	485
Bulls and Stags	48	55	46	51	50	58	55	53	63	54	61	53	45
Calves	172	181	150	171	133	142	137	144	152	138	162	155	142
Sheep and Lambs	469	489	441	493	487	478	440	447	482	439	507	481	480
Hogs	7,233	7,605	6,820	7,454	6,959	6,976	6,322	6,154	7,301	6,896	7,739	7,536	7,354
Million pounds													
Production													
Beef	1,827	1,932	1,705	1,870	1,747	2,007	1,979	1,939	2,062	1,813	2,042	1,842	1,680
Veal	25	27	24	28	23	26	25	26	28	26	31	29	28
Lamb and mutton	31	32	29	32	31	31	28	28	30	27	32	30	30
Pork	1,288	1,359	1,215	1,328	1,247	1,256	1,142	1,102	1,309	1,228	1,389	1,374	1,342
Cold storage stocks: 2/													
Beef	252	261	269	308	296	272	258	266	240	243	267	277	307
Veal	4	4	4	4	5	5	5	6	6	6	6	6	6
Lamb and mutton	8	8	8	8	8	8	10	10	9	9	8	8	8
Pork	256	272	308	297	319	323	293	256	225	226	232	221	234
Total meat	536	565	610	638	651	633	592	566	507	507	537	535	575
Trade:													
Imports (carcass wt)													
Beef and veal	195.4	202.3	189.7	206.0	173.7	188.7	210.6	195.6	209.5	192.2	187.2	195.6	204.7
Lamb, mutton, and goat	5.8	4.2	3.6	4.5	3.5	3.4	5.3	4.2	4.8	5.0	7.7	5.7	6.8
Pork	66.7	64.0	65.2	82.8	76.3	70.9	83.5	87.6	80.6	68.1	81.1	75.2	62.6
Exports (carcass wt)													
Beef and veal	91.0	72.9	73.3	86.2	70.4	85.0	81.7	84.7	100.6	84.5	89.7	96.7	80.3
Lamb and mutton	0.1	0.2	0.2	0.2	0.4	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.3
Pork	24.4	25.0	21.0	22.7	23.0	20.1	15.6	15.0	15.6	16.7	18.3	21.3	23.9

1/ Federally inspected and other commercial. Classes estimated. 2/ End of month. Beginning January 1977, excludes beef and pork stocks in cooler.

Size and Geographics of U.S. Turkey Growout Operations

Agnes M. Perez

Abstract: This article examines developments in the structure and concentration of turkey growout operations in the United States over the last three decades. Insights are offered on changes possible in the structure of turkey growout farms and their future locations. Turkey production continues to be concentrated in key areas of North Carolina, Minnesota, and California. Small turkey farms still account for over one-half of all growout operations, but production seems to remain concentrated in fewer, larger operations.

Introduction

The U.S. turkey industry is a growing part of the poultry and meat complex. Turkey meat production has increased 92 percent between 1980 and 1990, with concentrations in relatively small areas of the South Atlantic, West North Central, and the Pacific regions of the United States. Except for a few periods of short-term fluctuations, total ready-to-cook production has increased steadily from 1.2 billion pounds in 1960 to about 4.7 billion in 1990. Growth has been encouraged by the growing consumer demand for turkey as new further-processed products become available and the adoption of more cost-efficient production technologies encouraged by vertical integration.

Changes in the number and size of turkey farm operations during the past three decades reflect the vertical integration of the industry. A large number of small independent turkey producers were replaced by larger turkey growout operations. According to the *1987 Census of Agriculture*, a majority of turkey growout farms are small operations of less than 30,000 birds, but their number and share of production is declining. Large turkey growout operations, on the other hand, are increasing in number and account for an expanding share of production.

Historical data on the number and size of turkey farm operations from 1959 to 1987 and the geographic locations and production shares of these farm operations from 1960 to 1990 were analyzed to identify changes in the industry and to provide some explanations for these changes. Data from the National Agricultural Statistical Service, *Poultry—Production and Value* and *Turkeys* and the Bureau of the Census, *Census of Agriculture*, were used in this study.

Turkey Production Concentrated in Three Regions

The current turkey industry has developed mainly in the West North Central, South Atlantic, and the Pacific, and remains concentrated in key areas of these regions. The West North Central raised the most turkeys in the United States up through the mid-1980's. Beginning in 1986, the South Atlantic replaced the West North Central in turkey production.

Low-cost feed ingredients gave the Midwest an early lead in turkey production. However, some producers recognized more profitable agricultural investment opportunities in their region, and hence, slowed the growth of turkey enterprises (2). In contrast, some areas of the South Atlantic and South Central regions with less productive soil had more limited agricultural investment alternatives. However, these areas enjoyed certain cost advantages similar to those that encouraged expansion of broiler production in the Southeastern region. A readily available labor supply, lower wages, easy access to rail transportation, and proximity to major terminal markets and urban population centers in the South and East made turkey production an attractive business in the South.

Turkey production is growing fastest in the South Atlantic region. The South Atlantic share of production has increased annually over the past three decades, with some exceptions in the early 1980's. The regional share rose from 11 percent of total growout in 1960 to about 31 percent in 1990.

The large annual production increases in North Carolina and Virginia, particularly in the mid-1980's are the major contributors to the overall growth in the South Atlantic region. The West North Central region raised slightly over one-third of U.S. turkeys in 1960, with a majority produced in Minnesota, Iowa, and Missouri (Tables 1 and 2). This share declined to about 29 percent in 1980, where it has remained. The Pacific region contained 12 percent of the turkeys in 1990, a share which declined from around 20 percent in 1960, even while production increased in California.

North Carolina, Minnesota, California, Arkansas, and Missouri ranked as the top 5 turkey producing states in the United States, with 62 percent of all turkeys in 1990 (Table 3 and 4). Their percentage share of total production increased from the high 40's to mid 50's in the 1960's to the low 60's in the 1980's. North Carolina, Minnesota, and California produced nearly half of U.S. production, increasing from 43 percent in 1980 to 48 percent in 1990.

Factors Influencing the Location of Growout Facilities

Turkey production has historically become established in specific locations in the leading States, and growth has con-

Table A-1--Number of turkeys raised by region, selected years.

Region	1960	1965	1970	1975	1980	1985	1988	1989	1990
----- Thousand birds -----									
New England									
Maine	80	48	46	6					
New Hampshire	108	72	24	21	24	28	26	26	20
Vermont	28	28	15	7					
Massachusetts	362	309	224	125	126	156	150	150	170
Rhode Island	24	19	12	9					
Connecticut	235	175	100	36	25	35	30	30	30
Mid-Atlantic									
New York	722	374	306	155	258	314	343	400	480
New Jersey	166	490	109	74	69	88	100	100	100
Pennsylvania	1,605	1,750	2,266	2,838	5,510	7,100	7,900	8,400	8,430
NORTHEAST	3,330	3,265	3,102	3,271	6,012	7,721	8,549	9,106	9,230
East North Central									
Illinois	1,037	1,334	832	445	474	280	1,700	3,280	4,460
Indiana	3,092	4,004	4,970	5,043	6,192	6,941	13,200	13,200	13,700
Michigan	1,258	1,200	1,050	700	1,450	2,300	3,000	3,500	4,300
Ohio	3,148	3,508	4,232	2,835	2,320	2,800	3,600	4,100	4,750
Wisconsin	4,079	5,381	3,489	4,894	5,045	6,150	1/	1/	1/
West North Central									
Iowa	7,675	8,139	6,109	6,260	6,625	6,300	7,800	7,600	8,800
Kansas	865	692	326	154	132	275	227	324	400
Minnesota	14,275	15,567	18,266	22,752	25,500	30,400	38,500	43,100	46,300
Missouri	4,285	7,588	7,967	8,125	12,400	12,500	16,500	17,300	18,000
Nebraska	1,115	1,169	652	500	811	918	1,770	2,050	2,110
North Dakota	827	1,085	915	808	940	900	1,150	1,280	1,350
South Dakota	855	1,081	1,121	860	1,277	1,723	2,370	2,220	2,600
NORTH CENTRAL	42,511	50,748	49,929	53,376	63,166	71,487	89,817	97,954	106,770
South Atlantic									
Delaware	280	423	200	1/	326	140	135	100	110
Florida	206	209		1/					
Georgia	430	1,336	2,283	1,216	2,380	2,631	2,400	1,900	2,010
Maryland	170	266	80	72	86	2/	2/	2/	2/
North Carolina	1,800	4,699	9,579	14,400	24,750	31,850	47,900	52,200	58,000
South Carolina	628	822	2,718	2,585	3,202	2,850	5,570	5,360	5,500
Virginia	4,654	5,660	4,535	5,972	10,079	13,066	16,300	16,600	17,000
West Virginia	923	2,005	750	1,530	2,282	2,400	2,300	2,870	3,850
South Central									
Alabama	300	783	23	17					
Arkansas	2,132	4,802	7,258	7,100	14,500	16,000	18,000	19,800	22,000
Kentucky	358	994	82						
Louisiana	58	15	3	2					
Mississippi	144	102	25						
Oklahoma	1,265	1,445	1,646	1,370	2,215	1/	1/	1/	1/
Tennessee	129	65	10	4					
Texas	3,940	5,281	8,350	8,845	7,750	1/	1/	1/	1/
SOUTH	17,417	28,907	37,542	43,113	67,570	68,937	92,605	98,830	108,470
Mountain									
Montana	8	1/		1/					
Idaho	252	1/		1/					
Wyoming	13	4		1/					
Colorado	1,479	2,046	2,856	3,620	4,130	1/	1/	1/	1/
New Mexico	73	11		1/					
Arizona	97	109		1/					
Utah	2,801	2,859	3,946	3,446	2,409	3,082	3,900	3,590	3,930
Nevada	1								
Pacific									
Washington	525	523	615	225					
Oregon	1,415	1,545	2,178	1,075	1,170	1,300	1,800	2,100	2,300
California	14,536	15,667	15,585	15,771	20,786	20,500	26,500	30,200	32,000
Alaska									
Hawaii									
WEST	21,200	22,764	25,180	24,137	28,495	24,882	32,200	35,890	38,230
OTHER STATES 1/		230	386	268	3/	12,400	19,250	19,500	20,300
U.S. TOTAL	84,458	105,914	116,139	124,165	165,243	185,427	242,421	261,280	283,000

1/ States combined as Other States to avoid disclosing individual operations and are not included in their respective regional allocation.

2/ Maryland and Delaware combined.

3/ Estimating States reduced from 44 to 32 during 1979.

Source: (11, 12, 13, 14, 15)

centrated around these locations. The presence of production and marketing infrastructure such as feed mills, hatcheries, and processing facilities has helped to increase the number of growout operations in these locations. However, other factors also have encouraged the growth of the industry in these specific locations.

The geographic and climatic features of the growout areas in the leading turkey producing states were examined because of their influence on production cost. Achieving the ideal environment for growing turkeys is essential for efficient production. When the outside temperature and humidity are high, birds sometimes are not able to pant fast enough to remove the heat from their bodies (4,5). When birds are

Table A-2--Regional share of total turkeys raised in the United States, selected years.

Region	1960	1965	1970	1975	1980	1985	1988	1989	1990
----- Percent -----									
New England	0.99	0.61	0.36	0.16	0.11	0.12	0.08	0.08	0.08
Mid-Atlantic	2.95	2.47	2.31	2.47	3.53	4.05	3.44	3.40	3.18
NORTHEAST	3.94	3.08	2.67	2.63	3.64	4.16	3.53	3.48	3.26
East North Central	14.94	14.56	12.55	11.21	9.37	9.96	8.87	9.22	9.61
West North Central	35.40	33.35	30.44	31.78	28.86	28.59	28.18	28.27	28.11
NORTH CENTRAL	50.33	47.92	42.99	42.99	38.23	38.55	37.05	37.49	37.73
South Atlantic	10.76	14.56	17.35	20.76	26.09	28.55	30.77	30.25	30.55
South Central	9.86	12.73	14.98	13.96	14.81	8.63	7.43	7.57	7.77
SOUTH	20.62	27.29	32.33	34.72	40.89	37.18	38.20	37.82	38.33
Mountain	5.59	4.75	5.86	5.69	3.96	1.66	1.61	1.37	1.35
Pacific	19.51	16.74	15.82	13.75	13.29	11.76	11.67	12.36	12.12
WEST	25.10	21.49	21.68	19.44	17.24	13.42	13.28	13.73	13.51
OTHER STATES 1/	0.00	0.22	0.33	0.22	0.00	6.70	7.90	7.50	7.17
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00

1/ States combined as Other States to avoid disclosing individual operations and are not included in their respective regional allocation.

Source: (11, 12, 13, 14, 15)

Table A-3--Leading States in U.S. turkey production.

State	Rank in Turkey Production														
	1960	1965	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
North Carolina	12	9	3	3	2	1	1	1	1	1	1	1	1	1	1
Minnesota	2	2	1	1	1	2	2	2	2	2	2	2	2	2	2
California	1	1	2	2	3	3	3	3	3	3	3	3	3	3	3
Arkansas	11	8	6	6	4	4	4	4	4	4	4	4	4	4	4
Missouri	5	4	5	5	5	5	5	5	5	6	6	6	5	5	5
Virginia	4	5	9	8	6	6	6	6	6	5	5	5	6	6	6
Indiana	9	10	8	9	9	9	7	9	1/	1/	1/	1/	1/	1/	1/
Iowa	3	3	7	7	8	8	9	10	1/	1/	1/	1/	1/	1/	1/
Pennsylvania	13	15	16	13	10	11	10	8	1/	1/	1/	1/	1/	1/	1/
South Carolina	24	25	14	15	13	14	15	16	1/	1/	1/	1/	1/	1/	1/
Wisconsin	6	6	12	10	11	10	8	7	1/	1/	1/	1/	1/	1/	1/
Texas	7	7	4	4	7	7	11	11	1/	1/	1/	1/	1/	1/	1/
Ohio	8	11	10	14	16	16	13	13	1/	1/	1/	1/	1/	1/	1/
Utah	10	12	11	12	14	14	16	14	1/	1/	1/	1/	1/	1/	1/

1/ Rankings not appropriate as some States were combined with Other States to avoid disclosing individual operations.

Source: (11, 12, 13, 14, 15)

Table A-4--Number and percent of turkeys raised by top five turkey producing states, selected years.

Year	5-State production	U.S. total	5-State share
	--- Million birds ---		Percent
1960	45.4	84.4	53.8
1965	52.6	105.9	49.7
1970	59.7	116.1	51.4
1975	69.9	124.2	56.3
1980	97.9	165.2	59.7
1981	101.3	170.9	59.3
1982	98.5	165.5	59.5
1983	102.4	170.7	60.0
1984	105.0	171.3	61.3
1985	111.2	185.4	60.0
1986	126.0	207.2	60.8
1987	147.8	240.4	61.5
1988	147.4	242.4	60.8
1989	162.6	261.3	62.2
1990	176.6	283.0	62.4

Source: (11, 12, 13, 14, 15)

exposed to stress, the following conditions typically occur: reduced hatchability, reduced egg sizes, weight loss, and in severe cases increased mortality.

The general climate in the South Atlantic and South Central regions allow producers to use conventional houses, although some environmentally controlled houses also exist. Conventional houses have insulation, side curtains that can be opened during hot days, fans, and LP gas for heat in brooding (5).

Turkey houses in the northern climates require heavier foundations and more insulation. Some environmentally controlled houses have no windows, which makes them dependent on electricity to run fans and lights (4). During the winter, both conventional and environmentally controlled houses are normally lighted throughout and birds are fed more. The body temperature of birds is higher during periods of greater light intensity than during periods of dark-

ness (3). Increased feeding helps the birds increase fat, which in turn helps buffer low temperatures.

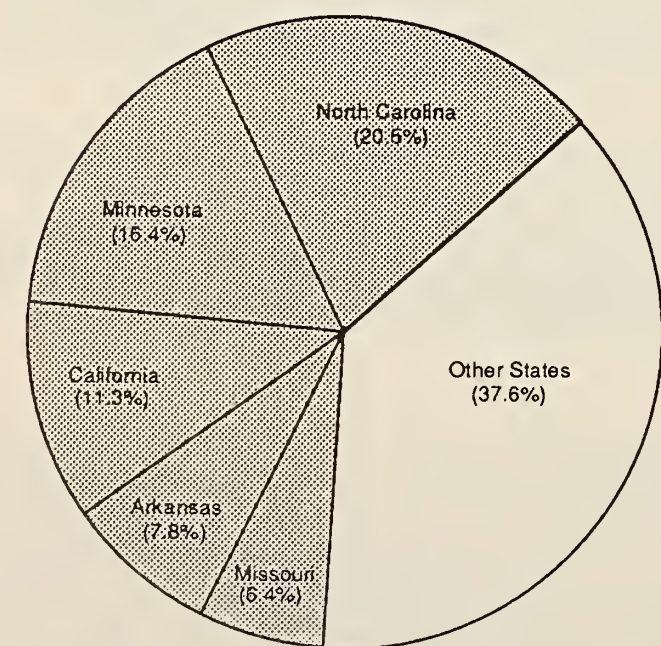
Growth in the Leading Turkey Producing States

North Carolina became the leading turkey producing state in 1981 and continued to grow in importance during the decade. North Carolina turkey production increased from about 25 million birds, or 15 percent of total growout in 1980, to approximately 58 million, or 21 percent of the total in 1990. Most of the growout facilities remain clustered generally in valleys and rolling plains in the southern part of the State and is also expanding in the eastern part. During summertime, valleys tend to have lower temperatures and less humidity than relatively flat lands near the coastal areas. Temperatures are more favorable in the upper reaches of valleys, and thus, it is easier and less costly for growers to provide birds with the desired temperatures for growth (6). In addition, proximity to major Eastern and developing Southern urban markets has encouraged the growth of turkey production in North Carolina in recent years (1).

Turkey production is expanding in the eastern part of North Carolina, near the corn growing areas of the State. Growers started raising turkeys as a secondary source of income. Primary sources of income are tobacco and corn. Many of the soils in this part of North Carolina are well-drained, an important consideration in locating growout sites for turkeys (5).

Minnesota, historically, has been one of the top three turkey producing states, raising most of the turkeys in the West North Central region. Output levels increased from 14 million birds in 1960 to about 46 million in 1990. Growth in Minnesota was aided by its proximity to major grain producing areas and accessibility to major Midwest markets (7,8).

Figure A-1
Leading Turkey Producing States in 1990



Share of U.S. production

These factors also influenced the concentration of turkey growout facilities in Iowa, Indiana, Missouri, Wisconsin, South and North Dakota, and Arkansas. Individual entrepreneurs, who have been very successful in growing and marketing turkeys, particularly in upstate Wisconsin and South Central Indiana, have encouraged expansion in these States (7).

Supplying its large market, California continues in the top three, with output reaching about 32 million birds or 84 percent of turkeys raised in the Pacific region in 1990. A majority of the growout facilities appear to have stayed in the Central Valley, also adjacent to corn producing areas of California. Temperatures and humidity in this part of California are much more conducive to raising turkeys than along the coastal ranges.

Missouri and Arkansas are also major turkey producing states, ranking fourth and fifth in 1990. Output in Missouri increased 45 percent, from over 12 million turkeys in 1980 to 18 million in 1990. In Arkansas, the number raised increased nearly 52 percent, from 14 million birds in 1980 to 22 million in 1990. Turkey operations in both states appear to remain clustered in the Ozark-Ouachita Highlands where temperatures are generally milder during the summer. Production in the rest of the leading states also appears to be settled generally in upland areas (8,10).

Virginia, Indiana, Pennsylvania, Iowa, and South Carolina also are important turkey producing states. In 1990, Virginia raised 6 percent of the turkeys; Indiana, 5 percent; Pennsylvania and Iowa, 3 percent each; and South Carolina, 2 percent. Growout farms in Virginia and Pennsylvania are in the Appalachian Highlands, with some from the latter also situated in the Gulf-Atlantic Rolling Plain. Those in Iowa and Indiana are concentrated in the Middle Western Upland Plain, while growout facilities in South Carolina are mostly clustered in the Piedmont Plateaus (8,10).

Fewer Turkey Farms as Volume Gradually Shifts to Larger Operations

The structure of the turkey industry has changed significantly from that of 30-40 years ago. Control of production generally shifted from small, individually owned farms to consolidated and vertically integrated firms, though not as completely as in the broiler industry. The number of turkey farms declined 92 percent, from 88,399 farms in 1959 to 7,347 in 1987 (Table 5). They also moved from being independent operations to mostly growout facilities operated under contract. During the same period, total industry output rose sharply from 80 million birds in 1959 to about 243 million in 1987, and average farm output increased from 900 birds in 1959 to 33,000 in 1987.

Production efficiencies in the turkey industry have encouraged the growth of more specialized turkey producing units

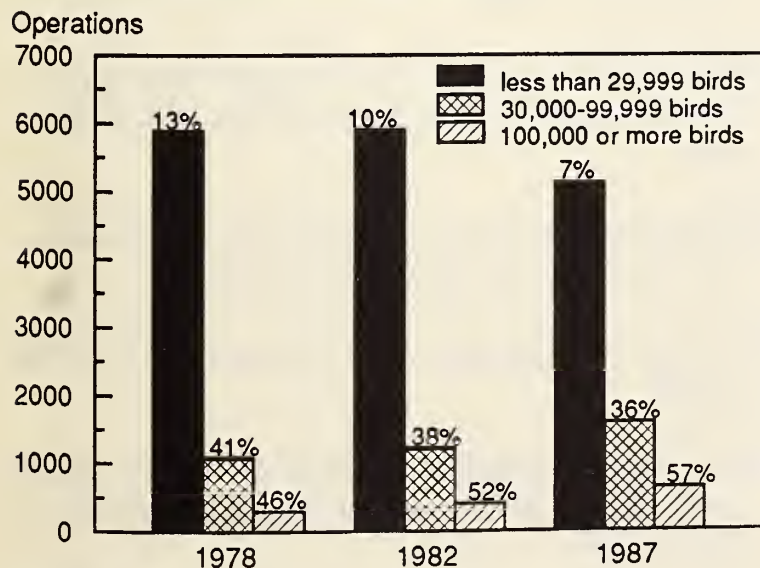
Table A-5--Number of farms with turkeys and number of turkeys reported, selected years

Year and Turkeys per farm	Number of Farms 1/	Number of turkeys	Percentage Distribution	
			Farms	Turkeys
	Number	1,000	Percent	
1959				
1-49	72,910	685	82.5	0.9
50-399	6,667	793	7.5	1.0
400-799	1,035	550	1.2	0.7
800-1,599	1,191	1,370	1.3	1.7
1,600-3,199	1,476	3,566	1.7	4.4
3,200-9,999	2,976	17,149	3.4	21.3
10,000 or more	2,144	56,285	2.4	70.0
TOTAL	88,399	80,398	100.0	100.0
1978				
1-1,999	4,485	273	61.7	0.2
2,000-7,999	433	2,094	6.0	1.5
8,000-15,999	421	4,904	5.8	3.5
16,000-29,999	538	11,543	7.4	8.2
30,000-59,999	701	29,110	9.6	20.6
60,000-99,999	389	28,658	5.3	20.3
100,000 or more	304	64,721	4.2	45.8
TOTAL	7,271	141,303	100.0	100.0
1982				
1-1,999	4,745	234	63.3	0.1
2,000-7,999	317	1,547	4.2	0.9
8,000-15,999	329	3,794	4.4	2.2
16,000-29,999	499	10,984	6.7	6.4
30,000-59,999	771	32,346	10.3	18.8
60,000-99,999	439	32,232	5.9	18.7
100,000 or more	398	90,898	5.3	52.8
TOTAL	7,498	172,035	100.0	100.0
1987				
1-1,999	4,007	238	54.5	0.1
2,000-7,999	295	1,411	4.0	0.6
8,000-15,999	316	3,673	4.3	1.5
16,000-29,999	495	10,903	6.7	4.5
30,000-59,999	1,002	42,565	13.6	17.5
60,000-99,999	594	44,138	8.1	18.1
100,000 or more	638	140,408	8.7	57.7
TOTAL	7,347	243,336	100.0	100.0

1/ In 1975, the definition of a farm was changed from any place with less than 10 acres from which \$250 or more of agricultural products were sold or any place with 10 acres or more from which \$50 or more of agricultural products were sold during the census year to any place from which \$1,000 or more of agricultural products were sold during the census year.

Source: (9)

Figure A-2
Number of Turkey Growout Operations by Size Category and Share of Total Raised



Source: (10)

since the early 1980's and have generally favored fewer but larger operations. The number of relatively large turkey operations in 1987 increased sharply from 1978. Farms that grew 100,000 or more birds in 1987 represented nearly 9 percent of all farms growing turkeys. These few very large operations grew 140.4 million turkeys, or 58 percent of the total in 1987, compared with 64.7 million, or 46 percent, in 1978. This output, combined with other, generally large, turkey operations with a minimum of 30,000 birds, grew 93 percent of the total in 1987, up from 87 percent in 1978. The number of relatively small turkey farms with less than 2,000 birds declined 11 percent from 4,485 in 1978 to 4,007 in 1987. Their output accounted for less than 1 percent of all turkeys raised in 1987.

There has been a general trend towards fewer and larger turkey farms in all regions between 1959 and 1987. The North Central region had the greatest number of farms but the

Table A-6--Regional production of farms growing turkeys, total grown, and average turkeys number of turkeys grown per farm, selected years. 1/

Item	North-east	East North Central	West North Central	South Atlantic	South Central	West	United States
<hr/>							
Number							
Farms:							
1959	4,523	5,550	13,659	14,741	38,118	10,121	86,712
1978	793	952	1,410	1,014	887	977	6,033
1982	1,179	1,152	1,602	1,161	1,013	1,391	7,498
1987	1,185	1,329	1,677	1,255	864	1,037	7,347
Thousands							
Turkeys:							
1959	3,492	13,164	27,735	11,778	7,376	18,970	82,515
1978	4,516	15,090	41,309	36,438	19,289	24,043	140,684
1982	6,115	18,747	48,537	48,921	20,341	28,981	171,642
1987	8,215	26,259	67,908	68,313	33,669	38,846	243,210
Number							
Turkeys per farm:							
1959	772	2,372	2,031	799	194	1,874	1,340
1978	5,695	15,851	29,297	35,934	21,746	24,609	22,189
1982	5,187	16,274	30,298	42,137	20,079	20,835	22,468
1987	6,932	19,759	40,494	54,432	38,968	37,460	33,008

1/ U.S. totals are not consistent with totals in table 5 as a result of unreported data to avoid disclosing individual operations.

Source: (9)

South Atlantic raised the most turkeys in 1987. Rapid expansion in the South Atlantic is associated with large growers, particularly in North Carolina, Virginia, and South Carolina. The South Atlantic raised an average of 54,432 birds per farm in 1987, up from 35,934 birds per farm in 1978 (Table 6). The average output per farm in the West North Central also increased from 29,297 birds in 1978 to 40,494 birds in 1987. Most of the productivity increase in the West North Central region appears to be coming from Minnesota, Missouri, and Iowa.

Conclusion

Turkey production remains well established in key states of the South Atlantic, West North Central, and Pacific. Specifically, North Carolina, Minnesota, and California raised almost 50 percent of the turkeys in the United States in 1990. These states probably will continue to dominate turkey production in the coming years. The areas with greatest potential for future expansion are those with similar land features as those sites where growout facilities are presently concentrated and areas close to turkey production complexes. Relatively similar land features indirectly influence production costs and aid turkey growers in implementing efficient management.

The total number of turkey growout operations has declined over the years, but the total number of birds raised has increased. The numerous small growout operations have decreased, both in number and share of production, while large growout operations have increased. These trends in farm numbers and share of production will probably continue as the turkey industry continues to consolidate. The turkey industry still seems to be composed of many small-sized growout operations. The largest proportion of total production, however, comes from the larger, but less numerous,

operations. These relatively large growout operations accounted for 93 percent of total turkeys raised in 1987, up from 87 percent in 1978. The largest growout farms, determined by size of operation and average output, are found in the leading turkey producing states of the South Atlantic.

Sources:

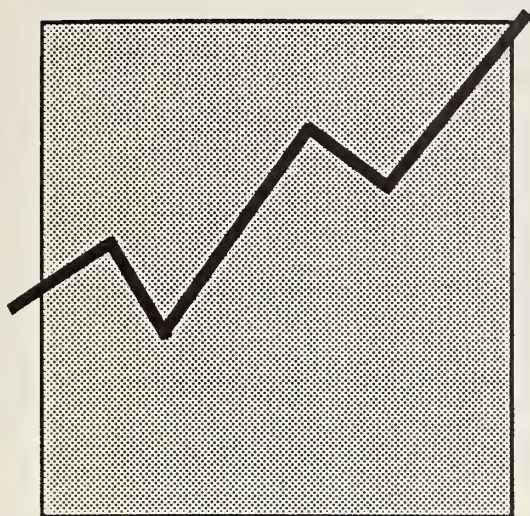
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